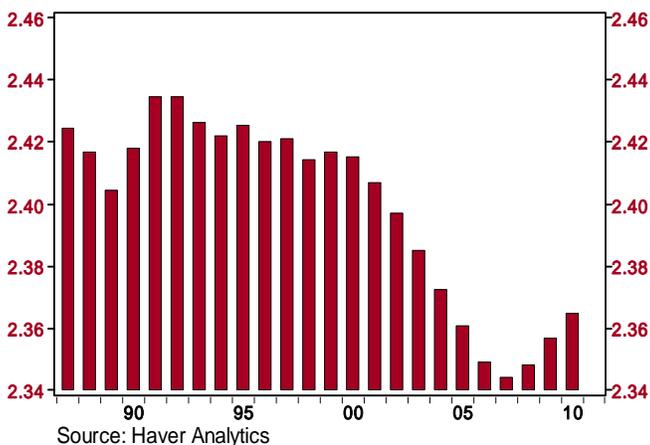


Housing At An Inflection Point

Summary: *The long awaited rebound in home building has finally started. Despite large remaining excess inventories, residential construction is poised to grow substantially over the next several years, just to get back to normal levels of building activity. In addition, home prices are at or very close to a bottom, at values that, relative to rents and construction costs, signal considerable appreciation in the years ahead.*

The excess inventory of homes remains enormous. From 1987 through 2001, the number of residents per home hovered narrowly around 2.42. Getting back to that level today would require the elimination of two million homes.

Resident Population Per Housing Unit



If this were all we knew about the housing market, we would have to conclude that national average prices have large further declines ahead.

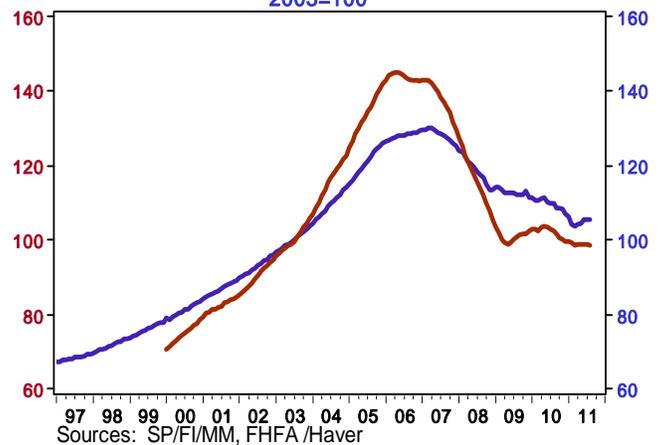
But knowing the size of the excess inventory is only part of the story. To determine future price movements we also have to know how quickly home builders are adding to or subtracting from inventories. The reason should be clear: an excess inventory that is growing would signal lower future prices than an excess inventory that is shrinking.

The US population age 25 and up is rising about 1.1% per year. (The overall population is growing slightly more slowly, about 0.9% per year, but residents below age 25 will not have much impact on the demand for homes in

the next few years.) Applying the 1.1% to the 129 million homes we should have today suggests the underlying demand for new housing units is 1.4 million per year, for both owner-occupied and rented homes combined. In addition, the “scrappage” of homes due to disasters and “knock-downs” should create net demand of about 200,000 units per year, bringing annual total demand to 1.6 million.

S&P/Case-Shiller Home Price Index: Composite 20
 2003=100

FHFA House Price Index: Purchase Only
 2003=100



By contrast, in the past year builders have started (and completed) fewer than 600,000 homes. The gap between total demand and the recent pace of construction puts us on track to eliminate the excess inventory in two years.

However, a *two-year* upward correction assumes no change in the pace of construction activity until the excess inventory is completely gone. More likely, builders will soon start increasing construction so that the excess inventory will be eliminated at nearly the same time as building activity gets back to normal. A *straight-line* increase back to 1.6 million units per year suggests the excess will be gone in four years, or 2015.

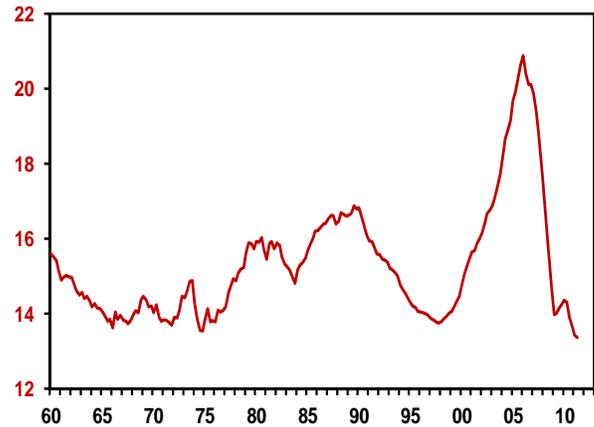
Of course, a four-year correction assumes home builders have perfect foresight, which they certainly did not have in the prior decade, back when they created the excess inventory in the first place. A more realistic forecast is that building activity returns to normal in 2016, a year later. That would mean the excess inventory turns into a small and temporary shortage of homes around mid-

decade. In turn, this should lead to a temporary overshoot in building activity, above 1.6 million units per year.

Regardless of which pattern the home building recovery takes, construction of new units has to increase about 167%, from 600,000 to 1.6 million, just to get back to normal, so inventories are eventually neither rising nor falling.

There are signs that construction activity is in the early stages of that long expansion. Multi-family construction has been rising for two years. But now the overall construction of new units, both single-family and multi-family combined, has been rising for four months in a row. And, unlike late 2009 and early 2010, recent gains are not due to a temporary federal homebuyer credit.

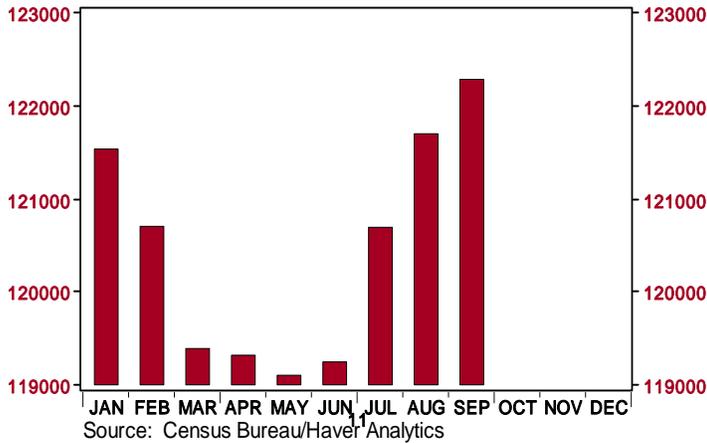
Price to Rent Ratio



Source: Federal Reserve Board, Commerce Dept.

To be clear, future appreciation for home values should reflect a return to fair value relative to rents and replacement costs as well as underlying increases in rents and costs. For an analogy to the stock market, we are arguing for both an increase in “earnings” as well as “multiple expansion.” Recently, rents and construction costs have been heading up again and that pace should quicken over the next couple of years given the loose stance of monetary policy.

Private Residential Construction: New Housing Units
SAAR, Mil.\$

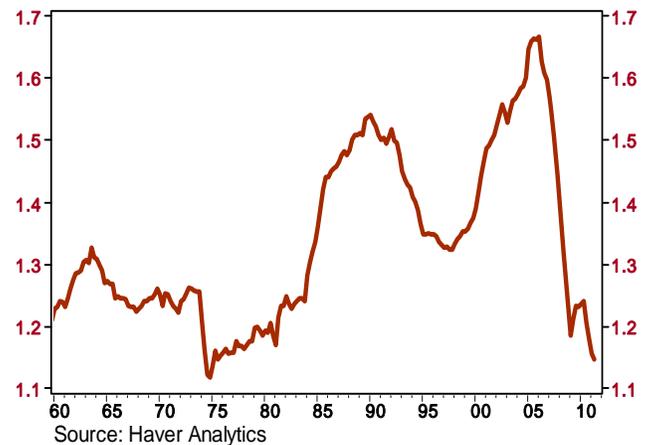


Source: Census Bureau/Haver Analytics

A housing market that has normal levels of inventory and building activity in five years has important implications for home prices. Normally, the price-to-rent ratio in the housing market is roughly fifteen. At the peak of the housing bubble the P/R ratio was a record high 21, about 40% above fair value. Now, the P/R ratio is only 13.4, the lowest in more than 50 years and roughly 10% below fair value.

Replacement costs also suggest home prices are about 10% below fair value. Historically, home prices average 30% higher than replacement cost. Every home is unique; not just the sum of its parts. Also, environmental, building, and zoning restrictions around the country drive a wedge between costs and market value. At the peak of the housing boom, prices were roughly 70% higher than replacement cost, by far a record high. Today, prices are only 15% above replacement cost. With the exception of nine months back in 1974-75 – a brutal recession year – this is the smallest gap in the past 50 years.

Home Price-to-Replacement Cost Ratio



Source: Haver Analytics

Despite the metrics that signal housing is under-valued, remaining inventories may put downward pressure on home prices for the next year in places with the greatest excess – locations like Ft. Myers, FL, Carlsbad, CA, Las Vegas, NV, and Phoenix, AZ. Additional headwinds will come from tight (non-mortgage rate) credit conditions and the recent reduction of the conforming loan limit in some high-priced areas.

However, for long-term investors the highest inventory areas may be exactly the place to buy. Large excess inventories mean prices in these locations should be the furthest below fair value relative to the rest of the country. Once the excess is eventually gone, prices in these areas will be substantially higher than they are today.

