THE ECONOMIC IMPLICATIONS OF

THE U.S. HOUSING SHORTAGE: UPDATE

Joseph J. McAlinden

Five months ago Catalpa issued a six-page special edition of *Perspectives* entitled "The Economic Implications of the Developing U.S. Housing Shortage." We argued that housing is bottoming, as many other observers have now come to recognize, and that shortages of homes will soon emerge. We also made the case for higher home prices and an upturn in new home construction, which we foresee will add 1.0% to 1.5% to the U.S. GDP growth rate. As this scenario unfolds, pro-cyclical monetary policy may adversely affect the inflation and interest rate outlook. We believe that this is NOT priced in to the financial markets.

Catalpa's *Perspectives* normally deals with a different subject each quarter. But the outlook for housing has been shifting so rapidly and so dramatically that an update is already in order.

Affordability remains higher than at any time prior to the end of the last recession.

THE BIG TEN

The last *Perspectives* took a close look at 10 key housing data series. In this update, we review the latest big 10 numbers:

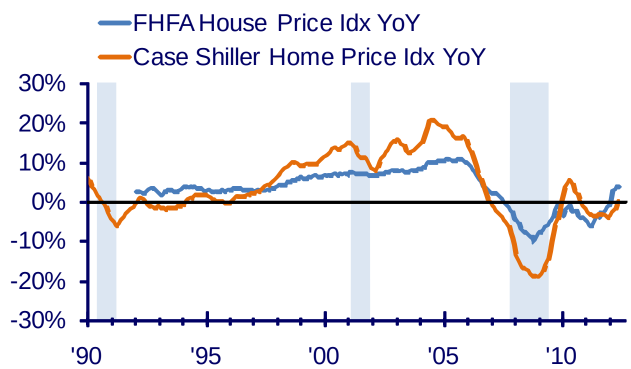
#1: Prices. The recently released Case-Shiller Index for June rose on an annual basis for the first time in two years; it has been up every month since its cycle low hit in March. The FHFA Index has been up for five months in a row after bumping along a bottom for the past year; it is now up 4.6% from its low point hit in March 2011.

#2: Affordability. After hitting an all time high around April 2011, this index has pulled back due to slightly higher mortgage rates and the uptick in home prices. However, the June data shows affordability still remains higher than at any time prior to the end of the last recession.

#3: Rent/Buy. Median asking rents ticked down in the second quarter but remain roughly 20% above year-end 2005 levels. The slight uptick in both mortgage rates and home prices has narrowed the spread slightly but the gap remains far below where it has been for most of the past two decades.

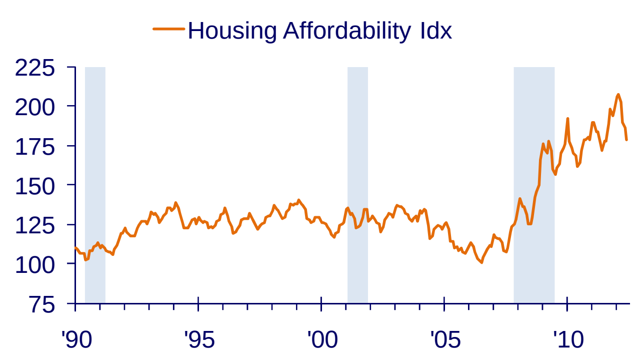
#4: Buyer Traffic. Like clockwork, within days of the release of our first report, the NAHB Index was reported to have dropped in April. The Prospective Buyers Traffic sub-index fell as well. But in the ensuing months the overall index and most of the sub-indices have recovered sharply. Buyer traffic has shot up to the highest level since 2006. Expected Sales have shown a similar surge.

THE ROAD TO RECOVERY



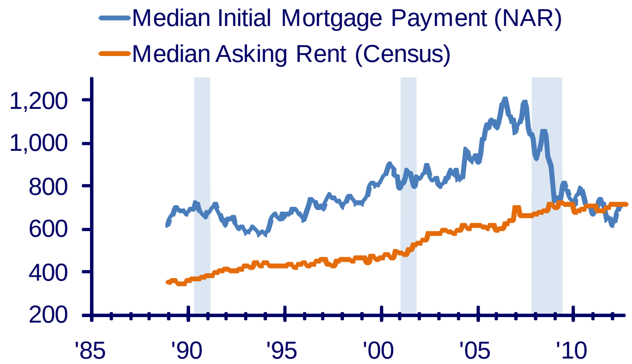
Source: Haver Analytics, Catalpa Capital Advisors

HOUSING AFFORDABILITY



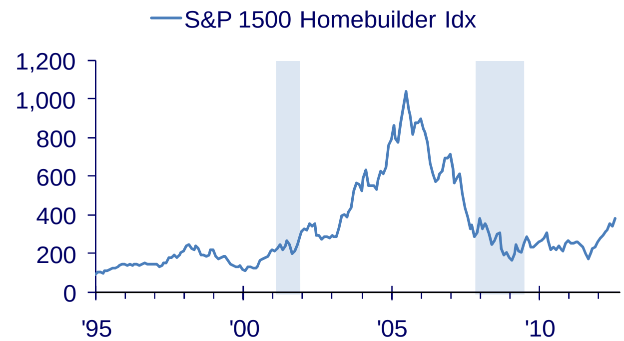
Source: Haver Analytics, Catalpa Capital Advisors

TO RENT OR BUY



Source: NAR, Haver Analytics, Catalpa Capital Advisors

HOMEBUILDERS



Source: Haver Analytics, Catalpa Capital Advisors

#5: Homebuilder Rally. Homebuilder stocks remain the top group for the year to date – up nearly 60%. From their October 2011 low they have soared 127%. Admittedly, investors sometimes get things wrong – witness the frantic buying of dotcoms in 1999 – but the recent homebuilder rally looks more like confirmation of the turning point in the fundamentals.

> *The recent homebuilder rally looks more like confirmation of the turning point in the fundamentals.*

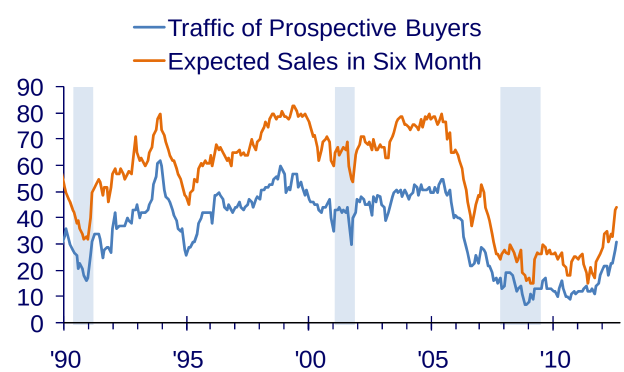
#6: Home Sales. Total home sales remain up by about a third from their cycle low of two years ago, but this year have been churning sideways … so far. New home sales have climbed back to match the recovery high of 372 thousand hit in May but are still more than 1 million units below the 2005 peak. The latest homebuilder surveys discussed above suggest further gains should materialize over the next few months. Meanwhile, existing home sales have fallen off from their spring recovery but the latest pending home sales data should be a harbinger of stronger months ahead.

#7: Mortgage Applications. The Mortgage Bankers Association's weekly index of applications for new mortgages to purchase a home has been the curious outlier in the housing recovery data. Mortgage applications continue to bump along the low levels of 150-200 thousand. Cash transactions explain part of the sluggishness but other forms of financing may be playing a role.

#8: Inventory. Existing home inventories have climbed slightly since the start of 2012 but are down from April levels. New home inventories have fallen further and continue to hit record low levels: The latest figures are the lowest in the half century history of the series. The combined inventories of new and existing homes are at levels that will be inadequate if demand continues to improve.

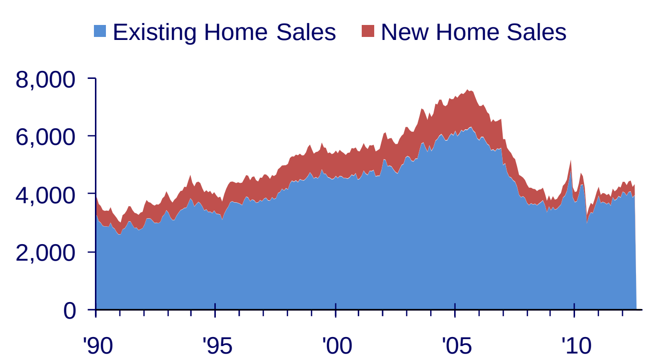
#9: Shadows. The "shadow" inventory threat has been the hardest bearish argument to refute. Some of the highest estimates had put the shadow number at 11 million, and

HOMEBUILDER SENTIMENT



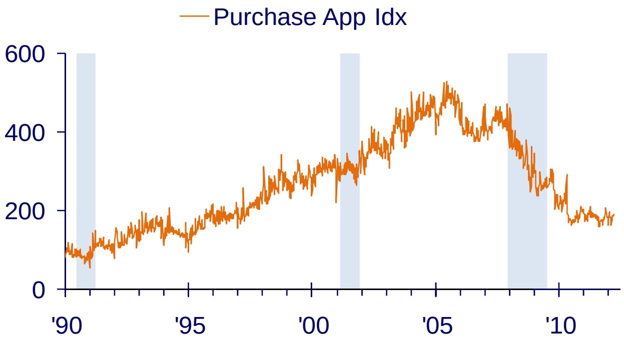
Source: Haver Analytics, Catalpa Capital Advisors

HOUSE SALES



1,000s saar. Source: Haver Analytics, Catalpa Capital Advisors

MORTGAGE APPLICATIONS



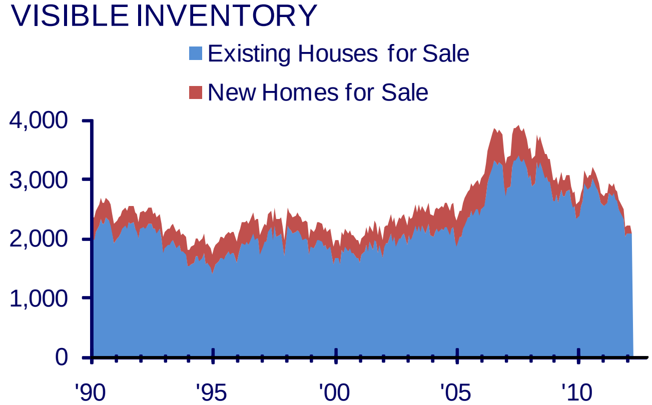
Source: Haver Analytics, Catalpa Capital Advisors

these were expected to start hitting the market this year as foreclosures surged and were put up for sale after a number of states worked out a settlement with the banks regarding the foreclosure process. But no such deluge has occurred. Instead, most estimates of the shadow inventory have been coming down. The CoreLogic shadow inventory numbers have dropped by about one-third since hitting a peak in January 2011.

The developments of the past few years have set the stage for a shortage of housing in the U.S. with major implications for global growth.

#10: Shadow Demand. In our Spring report we had estimated close to five million units of shadow demand because of the under-build of recent years. Since that time housing starts have inched higher but still remain at levels just one-half that of long term demand. Permits have climbed more strongly but have a long way to go.

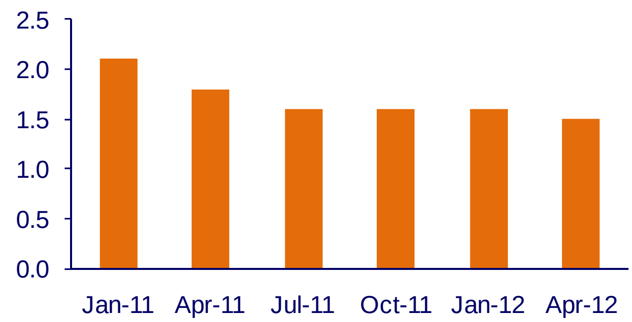
VISIBLE INVENTORY



1,000s saar. Source: Haver Analytics, Catalpa Capital Advisors

SHRINKING SHADOW

Estimated US houses yet to enter the market, millions of units



Source: CoreLogic, Catalpa Capital Advisors

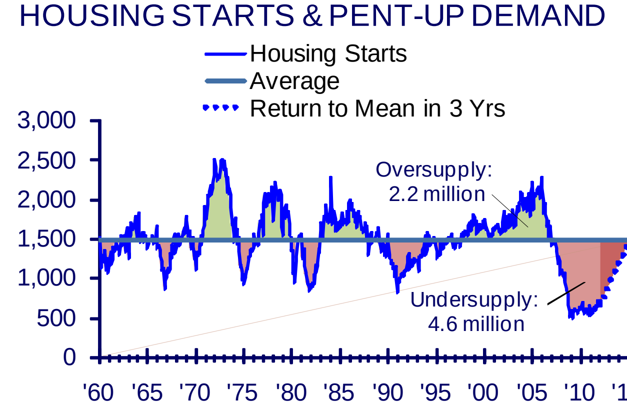
ECONOMIC IMPLICATIONS

Most market commentators and economists remain focused on the Fed, Europe, and China as holding the key to the global outlook. These considerations are important and will have a bearing on where the world economy goes from here. Meanwhile, the U.S. housing data has prompted many to acknowledge signs of a bottoming and nascent upturn. Our view, by contrast, is that the developments of the past few years have set the stage for a shortage of housing in the U.S. which will have major implications for global growth.

A strong residential construction upturn would deliver a huge boost to U.S. GDP growth over the next couple of years and help bolster the global economy. Over the long run, residential investment has accounted for an average of 6.0% of total economic activity. At the low point, a few quarters ago, it was just 2.5%. The latest GDP report shows it perking up to 2.7 %.

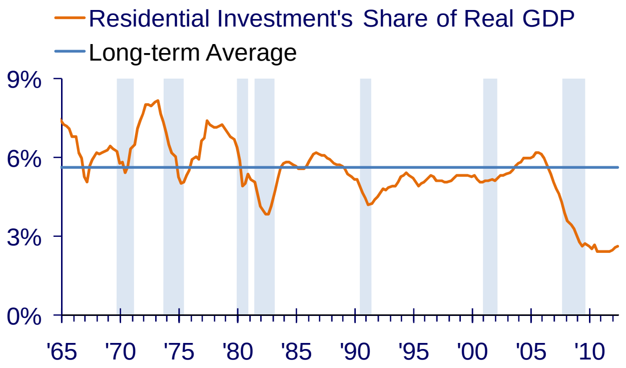
If housing returns just to its long-term average share of GDP, it will add over 3.0% to the level of GDP, roughly consistent with housing starts getting back to their long-term

HOUSING STARTS & PENT-UP DEMAND



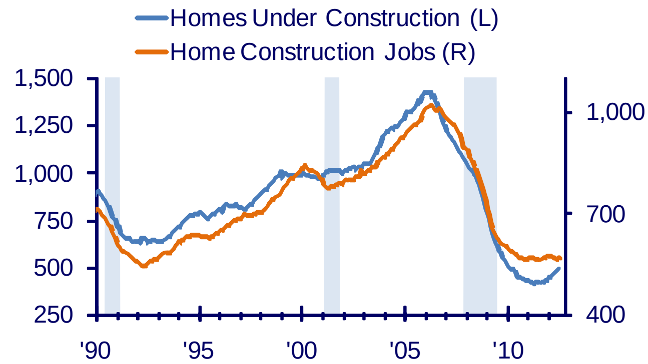
1,000s saar. Source: Haver Analytics, Catalpa Capital Advisors

HOUSING AND THE ECONOMY



Source: Haver Analytics, Catalpa Capital Advisors

CONSTRUCTION JOBS



1,000s saar. Source: Haver Analytics, Catalpa Capital Advisors

trend of 1.5 million per year. Even if the recovery process is spread out over another three years, residential investment alone would therefore add over 1.0% per year to growth. And these admittedly superficial calculations ignore the peripheral effects of stronger housing activity.

The indirect impact of a housing recovery on the economy can be just as significant. When times are good and jobs aplenty, for instance, construction workers buy pickup trucks. More jobs also means more spending in stores, restaurants, and so on. Not surprisingly, in the past the level of housing starts has had a strong relationship with the number of people holding jobs in construction. If, as we expect, starts claw their way back to the long term average of 1.5 million units per year, the past relationship would suggest the direct addition of hundreds of thousands of jobs just in the construction industry.

Our best estimate is that the housing upturn will add 1.5 percentage points to annual GDP growth over the next several years.

Altogether, our best estimate is that the housing upturn will add 1.5 percentage points to annual GDP growth over the next several years. If the rest of the economy merely continues along as it has, in other words, there could be a multi-year acceleration in the growth rate to the 3.5% to 4.0% range.

A broad recovery in home prices has been emerging in the data, but there is still a long way to go. In order to return to peak levels, the overall home price index needs to gain a total of 54.0% from the trough; so far, it is just over a tenth of the way. Dallas is the most advanced: its decline of 11.2% was the smallest during the bust but it is already more than halfway back. Meanwhile in Las Vegas, the city where the biggest bubble popped, home prices plunged 61.7% and are up a modest 4.5% from the trough; it could be many, many years before house prices fully recover.

If sustained, rising home prices will do a world of good for the US economy. A large share of homeowners with negative equity will find themselves back above water. The legions of banks that had written down their real estate assets will need to write them back up. As higher prices feed into appraisals, cash-strapped local and state governments will be lifted out of the red as property tax revenues rise. The Federal Reserve, for its part, will finally allow its myriad alternative stimulus measures to expire and return to traditional monetary policy.

Home prices in the US might be approaching an important tipping point. Many potential homeowners stayed on the sidelines when prices were falling, waiting for the bargains to get even better. With incomes strong and mortgage rates at record lows, housing affordability might be as good as it will ever get. As pent-up demand enters the market, house prices will receive further support in a self-reinforcing cycle that accelerates the healing process in housing.

The implications of a house construction upturn and home price rebound do not appear to be shifting the Fed's easy policy stance. Further monetary stimulus at this point could turn out to be a gigantic pro-cyclical policy error. Within 3-4 years, bond yields could double while stocks climb irregularly upward. At some point, still several years out, the old proverbial "cutting off the punchbowl" moment will induce another bear market, but from a peak substantially higher than current levels.