Residential Investment: a Sleeping Giant

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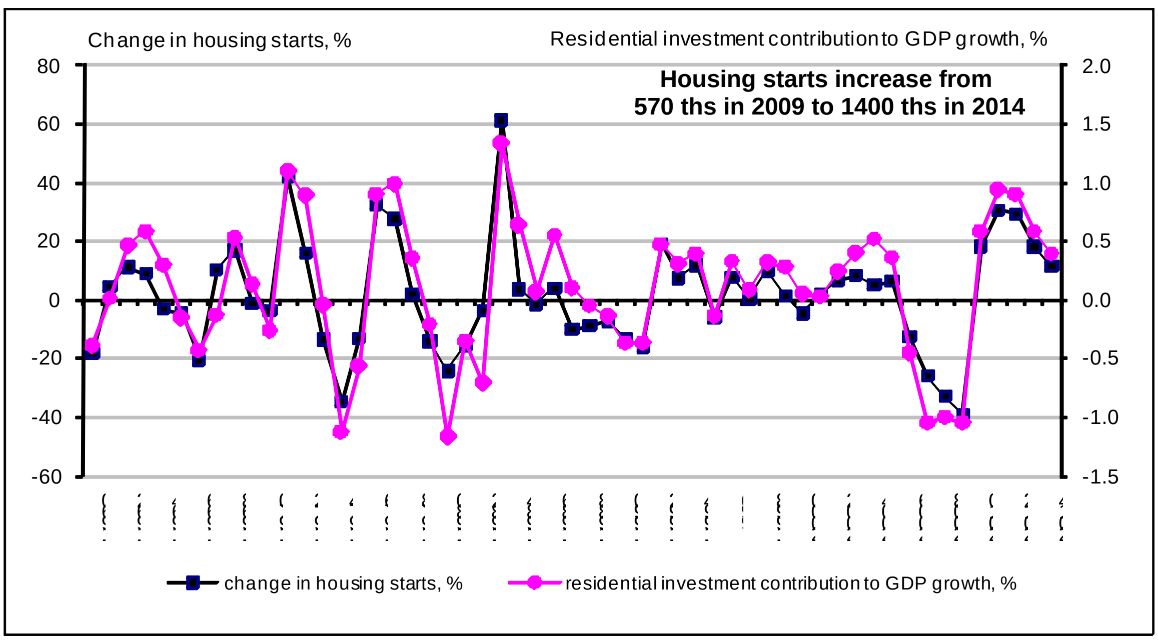
Residential investment is no longer a drag on the U.S. economy. Instead, it will slowly return to being a major driver of domestic GDP growth and should play an important role in this recovery for a number of years.

Despite being a relatively small share of the U.S. gross domestic product (typically 3-4% of GDP), residential investment can have a more dramatic effect on GDP *growth.* This happens when residential investment *increases or decreases.* As the chart below shows, during the recessions of 1973-75 and 1980-82, residential investment subtracted close to a full percentage point from annual GDP growth but then added just as much in the first year or two of the subsequent recovery. In the last decade, residential investment's effect was more sustained. In 9 of the years between 1993 and 2005 it added over 0.4 percentage points annually to GDP growth as construction increased from 1.2 to 2.1 million units.

Figure 1: Change in Housing Starts and GDP Growth Contribution



Sources: BEA, BOC, CBRE Econometric Advisors

Residential investment is realized through new construction activity. Figure 1 illustrates the very close relationship between the *change* in housing starts and residential investment's contribution to GDP growth. Since housing starts peaked at an annualized pace of over 2.1 million units in 2006q1, residential investment plunged and this has had a strong negative impact on economic growth. Starts declined continuously since then – finally bottoming out at a record low of 530 thousand in 2009q1 – two thirds below their historical average. During this period residential investment was subtracting about 1 percent from GDP growth on a yearly basis.

With housing starts increasing by 50 thousand units in 2009q3, residential investment added 0.5 percent to that quarter's GDP growth – the first positive contribution in over three years. That is exactly what one would expect given the relationship observed historically between changes in housing starts and residential investment's effect! So going forward into 2010 and beyond, just how much of a contribution to the U.S. GDP growth could residential investment provide?

To answer this question, one needs to consider where new supply (housing starts) currently is relative to new demand (primarily from household formation) as well as the existing housing overhang. At first it may seem surprising that housing starts would be rising at all given recent job losses, an already record-high residential vacancy rate, and ongoing foreclosures. Census is reporting that in 2009 new housing demand, measured by changes in the number of households (occupied units) are about 800 thousand per year – far less than the historical average. With annual housing demolitions of about 200 thousand units, together with at least 100 thousand 2nd home purchases, total housing "demand" in 2009 has been about 1.1 million units – or *twice* the current level of construction. Moving into 2010, household formation should recover a bit – perhaps to .9 million, creating total demand of 1.2 million. If construction moves up a bit – to about 600 thousand, then again there would remain "excess demand" of 0.6 million units together with the .5m from 2009 In short, by the end of 2010 we should have consumed 1.1m units from the excess inventory.

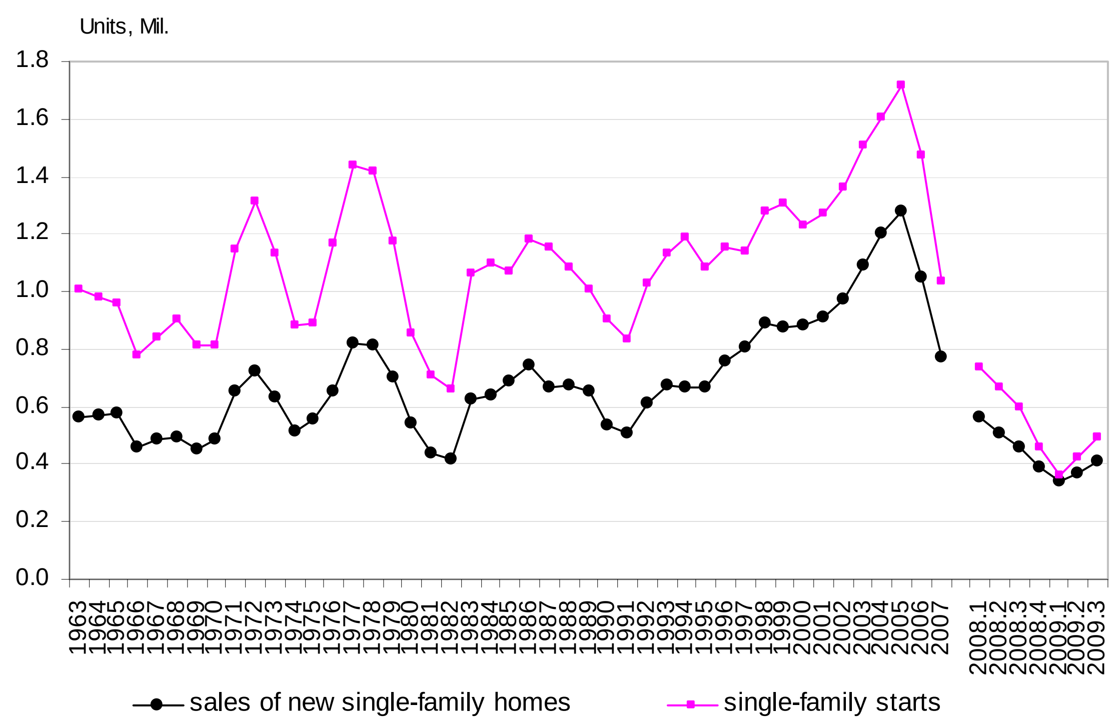
How much excess inventory is there? Census again reports that in early 2010 there is only a quarter million more *year-round* vacant units for rent and for sale than when the housing correction began in 2007! There is about 1.5 million more than the historic average from 1990-2000.

From 2011 on, we should gradually return to a more stable long term housing demand of 1.4 million units (1.1 million from household formation plus .3 million from demolitions and 2nd home demand). Supposing construction still does not meet all of this demand (hence allowing prices to gradually rise) it is quite reasonable to expect 2011 starts to increase to .85 million and then to 1.0 million in 2012, 1.3million in 2013 and finally 1.4 million in 2014. This trajectory of "under supply" should allow prices to continue in recovery mode for the full 2010-2014 period. It also brings the vacant inventory of units back to average levels - somewhere around 2012. In such a scenario (graphed as a forecast in Figure 1), the recovery of housing construction generates an average 0.7%

annual contribution to GDP growth – for 5 full years. This cumulative boost of over 3 percent is far greater than during the recoveries from previous recessions and is exceeded only by the ramping up of housing construction right after the World War II

As a final point, we suggest that the 2009 demand for new homes actually has been quite solid – it is only low in magnitude because we are building so few! In normal years, new home sales are about 75% of single family starts. The other 25% are in some sense "pre-sold" and directly contracted for. As shown in Figure 2, during the last several quarters, this part of the market seems to have dried up as the sale of units in the pipeline has gobbled up virtually every new start. It is not surprising that all of the recent increase in overall housing starts was driven by the single-family segment which is already adding volume in expectation of a more robust demand down the road.

Figure 2: Sales and Starts of New Single-Family Homes



Sources: BOC, CBRE Econometric Advisors

Thus despite the glut of existing homes, there is still demand for new product. In fact one might argue that at current depressed construction levels there may even be "excess demand" – for newly constructed homes. This exists mainly in those parts of the country that did not over-build and that have been less hard hit by the recession. As a broader economic recovery solidifies in the coming years, residential investment will have to grow – a great deal, for a sustained period. Housing construction is a sleeping giant that is about to wake up.