Economic Viewpoint

Desjardins Economic Studies
www.desjardins.com/economics

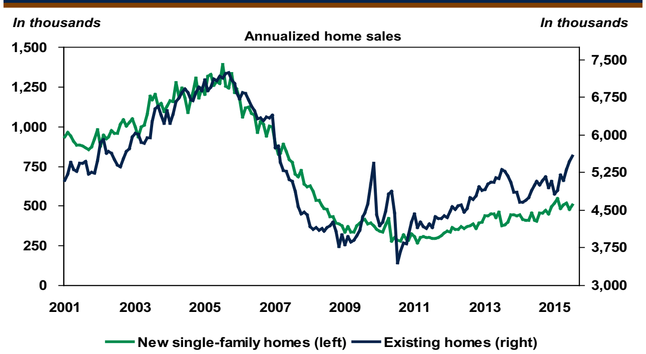
September 15, 2015

Ten years after the peak of the U.S. housing bubble

A 10-graph analysis

U.S. home sales reached an all-time high in the summer of 2005, with new construction and housing prices hitting their cyclical high a few quarters later. The collapse of the housing bubble had a devastating effect on the U.S. and international economies and rattled the financial markets as well. While we will not revisit all the causes and consequences of the housing craze, this *Economic Viewpoint* will use ten graphs on the U.S. housing market to analyze the magnitude of the crisis and the market situation ten years later. It's clear that the U.S. economy is still feeling the aftershock and, for several indicators, the situation is far from back to normal.

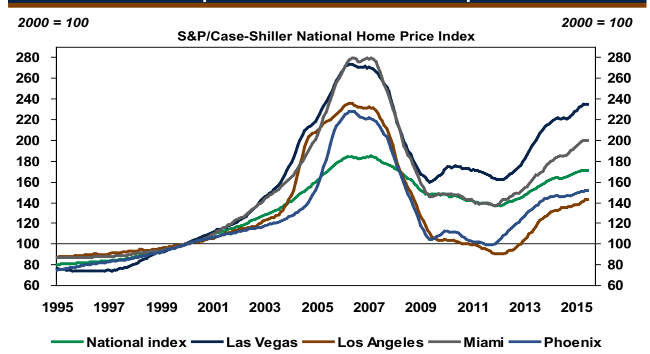
Graph 1 – Still a long way from the peak of the bubble in 2005



Sources: U.S. Census Bureau, National Association of Realtors and Desjardins, Economic Studies

Marking the apex of the real estate cycle that characterized the first half of the 2000s, the summer of 2005 was more about volume than prices. Sales of new homes hit an all-time high in July 2005 with 1,389,000 single-family dwellings sold (annualized), while existing homes (single-family and condominiums) peaked in September 2005 with 7,250,000 units exchanging hands. The decline that ensued continued until it bottomed out in 2010 for existing homes (-52.0%) and in February 2011 for new homes (-80.6%). The market has since been on the rise, with sales of existing homes surging in the last few months.

Graph 2 – In the areas hardest hit by the housing collapse, home prices are still far from their peak



Sources: Standard & Poor's and Desjardins, Economic Studies

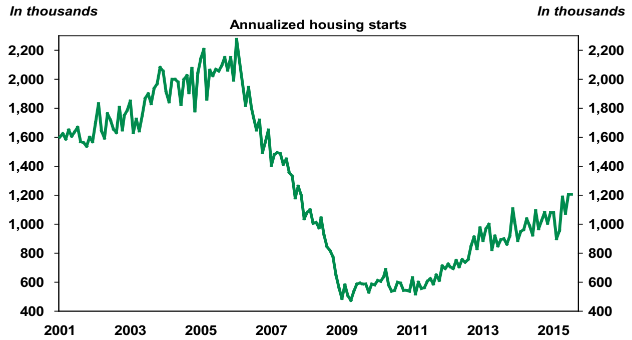
Between the time momentum picked up in 1996 and the peak recorded in 2006, the price of existing homes grew 129% according to the S&P/Case-Shiller U.S. National Home Price Index. While the advance was more spectacular in some areas, namely California (+257.6% in Los Angeles), Florida (+221.9% in Miami), Nevada (+170.0% in Las Vegas) and Arizona (+203.2% in Phoenix), so was the decline. In the cities most affected, prices fell by more than 50%. For the most part, prices bottomed out in early 2012. Since then the national average has rebounded by 25.0%. Dallas and Denver City in Texas have already surpassed their peak of the 2000s, while San Francisco, Boston and Portland are not far behind.

François Dupuis
Vice-President and Chief Economist

Francis Généreux
Senior Economist

514-281-2336 *or* 1 866 866-7000, ext. 2336
E-mail: desjardins.economics@desjardins.com

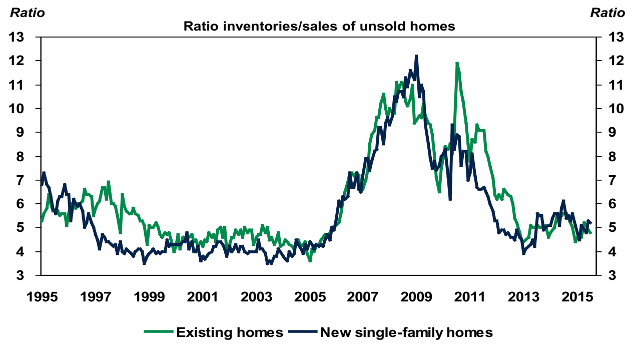
Graph 3 – Housing starts plummet



Sources: U.S. Census Bureau and Desjardins, Economic Studies

Builders were slow to catch on that the real estate boom was coming to an end. Housing starts reached a cyclical high of 2,273,000 units in January 2006. The ensuing crash was dramatic, with starts plummeting 79.0% to 478,000 units in 2009, a low that was almost repeated in 2011. Although housing starts have since gone up 152.3%, they are still not far from the lows recorded in previous cycles.

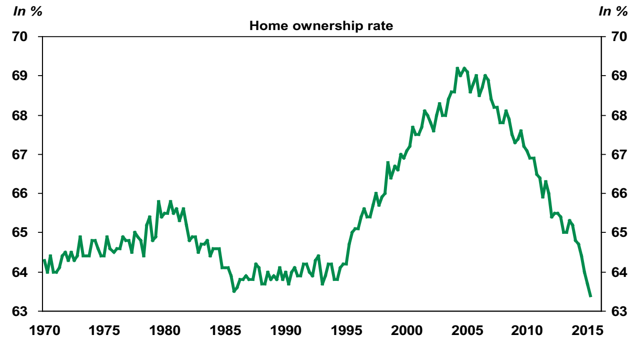
Graph 4 – The number of unsold homes is very low



Sources: U.S. Census Bureau, National Association of Realtors and Desjardins, Economic Studies

At the peak of the bubble, the inventory of houses for sale was misleading since demand was so strong, the supply did not seem excessive. This situation changed dramatically, with demand collapsing when easy access to mortgages dried up. On the supply side, builders were too slow to react, a situation compounded by households trying to sell a house they could no longer afford. The market quickly went from under-supply to over-supply. However, the drop in construction shrank the supply, and towards 2012 the market moved into more balanced territory.

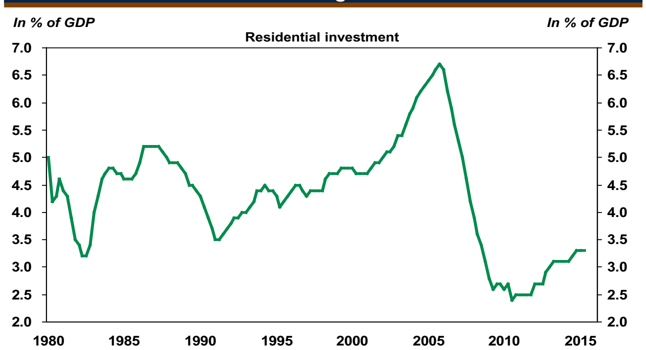
Graph 5 – The increase in the home ownership rate was completely wiped out



Sources: U.S. Census Bureau and Desjardins, Economic Studies

One of the best ways to illustrate the frenzied activity during the housing bubble is to look at the home ownership rate, defined as the proportion of households who own their homes. This rate has been historically stable except for a sharp increase that began in 1995 and peaked at the end of 2004. The spike in this rate reflects mostly the easy availability of credit. Weak home sales and tough economic times have brought the home ownership rate back to its historical average and, going forward, the number of owners is expected to better correlate with the change in the number of households, which incidentally, is on the rise.

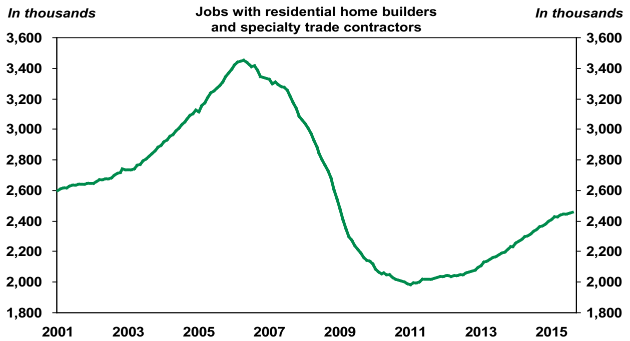
Graph 6 – At the peak of the bubble, residential investment accounted for a large share of GDP



Sources: Bureau of Economic Analysis and Desjardins, Economic Studies

The housing bubble saw residential investment assume a growing share of the U.S. economy. After averaging 4.6% of GDP from 1960 to 1995, it increased sharply, reaching 6.7% at the end of 2005. When the housing market crashed, the U.S. economy could no longer count on this sector to fuel growth. Residential investment tumbled to a low of 2.4% in summer 2010, and as of spring 2015, was still very low, at 3.3%.

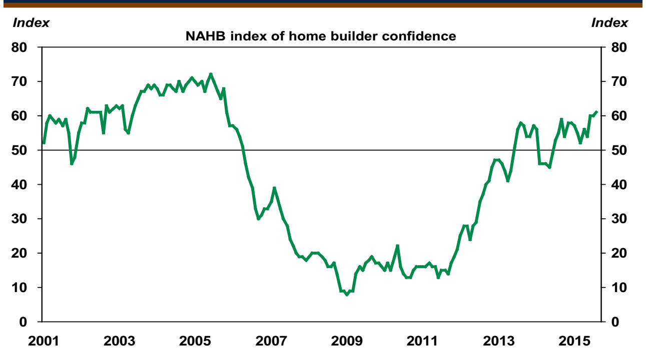
Graph 7 – Residential construction jobs declined



Sources: U.S. Census bureau and Desjardins, Economic Studies

As a result of the surge in residential investment, employment in the housing sector boomed in the first half of the 2000s, As such, 849,000 direct housing-related jobs were created (building construction and specialty trade contractors) between January 2001 and the peak of April 2006, almost 25% of all jobs created in the United States during this period. The labour market was dealt a severe blow when the bubble burst, losing 1,463,000 jobs by 2011, a decrease of 42.4%. Since then, 469,400 positions have been added.

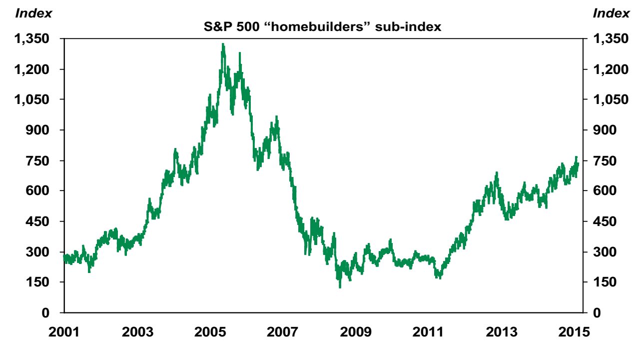
Graph 8 – Home builder confidence fell sharply, but is now on the rise



Sources: National Association of Homebuilders and Desjardins, Economic Studies

Riding the wave, home builders couldn't help but be confident, that is, until the bubble burst. The NAHB index of home builder confidence tumbled to levels rarely seen for similar indexes, where 50 marks the difference between expansion and contraction. The NAHB index remained very low between 2007 and 2012, dashing hopes of a housing recovery. However, it then rebounded fairly quickly to over 50, signalling a more positive outlook for the housing sector.

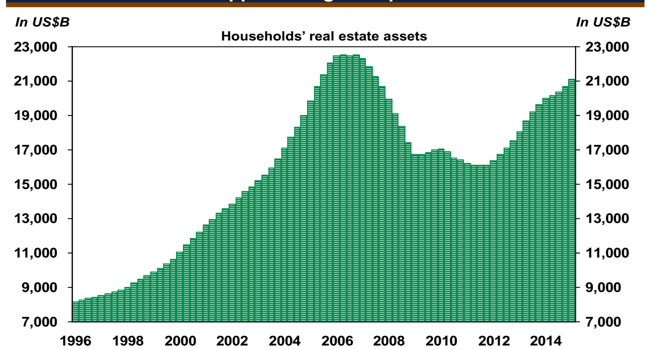
Graph 9 – The bubble had a major impact on home builders' stock prices



Sources: Bloomberg and Desjardins, Economic Studies

The early 2000s were boon years for home builders, who saw their stocks soar. The S&P 500 homebuilders sub-index grew fivefold in just a few years. In hindsight, this heady rise looked very much like the increases observed during other periods of stock market euphoria. And just like in the other cases, the morning after was all too sobering with this sub-index losing 90.6% of its value between the peak of July 2005 and the low of November 2008. Reflecting the sector's improved performance, the index has since regained almost half of the value lost.

Graph 10 – Total value of households' real estate assets approaching their peak



Sources: Federal Reserve Board and Desjardins, Economic Studies

The value of homes owned by households also reached a peak in the mid-2000s, rising from US$8,000B in early 1996 to US$22,500B in 2006. Roughly 30% of this value was wiped out as prices dropped and households had to sell or abandon their homes. Higher prices and household formation have since helped restore the value of homes, which, in current dollars, is now approaching the peak of 2006. However, in constant dollars, the value in Q1 2015 was still about 19% below the peak.

CONCLUSION

This brief review of the U.S. housing bubble and its collapse shows just how dangerous the situation had become in 2005 and that a crash was inevitable given the housing market's uncharacteristic growth. Ten years later, it's clear that the economy is still feeling the aftershock and, for several indicators, the situation is far from back to normal. Conversely, the fact that the home ownership rate is back to its historical average suggests that we are now on more solid footing and that healthy growth will continue. That painful period where easy credit and overbuilding brought down the housing market should serve as a reminder that this type of imbalance can happen again. With that in mind, we can glance at Canada where some of the regional markets seem overheated.

Francis Généreux
Senior Economist