The Office of Economic Policy

HOUSING DASHBOARD

January 20, 2016

Housing activity continues to strengthen. Residential investment boosted GDP growth by 0.3 percentage point over the four quarters ending in 2015Q3, and the available data suggest that residential investment is on track to make a modest (albeit somewhat smaller) contribution to growth again in Q4. We expect that the pick-up in household formation will lead to further improvement in 2016 despite some increase in interest rates.

Meanwhile, home price appreciation has moderated—from a double-digit pace in late 2013 and early 2014 to a more sustainable mid-single-digit pace now. The recovery in home prices means that there has been a substantial decline in the share of mortgages that are underwater, from around 25 percent in 2010 and 2011 to 8 percent today. In select states, where prices remain substantially below their earlier highs, the share of mortgages underwater is still considerable, at 12 percent or higher. However, these areas were among the most over-valued during the housing boom, so a return to those highs is unlikely in the near term.

Although some mortgage borrowers continue to struggle in the wake of the crisis, delinquency and foreclosure rates are closing in on their pre-crisis ranges. The number of distressed sales also continues to drop.

This month’s Housing Dashboard features a new table, the “Housing Market Flash,” that is designed to provide a summary of the direction in which key housing indicators are trending as well as how current levels compare with their norms prior to the housing boom.

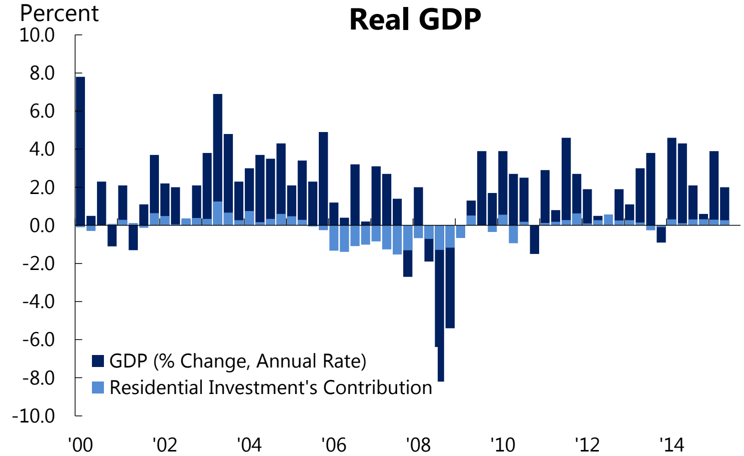
Housing Market Flash

Wednesday, January 20, 2016

		Pre-bubble norm (2000-2002 average)	Trough	Current level	Current 12-month average versus year-earlier value		Current level versus pre-bubble norm (2000-2002) average
Single-family homes							
Sales (thousands)	**New**	**921**	**270** Feb-11	**490** Nov-15	**13.8%**	Improved	**-46.8%**
	Existing	**4,779**	**3,060** Jul-10	**4,150** Nov-15	**6.5%**	Improved	**-13.2%**
Inventory of homes available for sale (months' supply at current sales rate)	**New**	**4.1**	**12.2** Jan-09	**5.7** Nov-15	**-0.2** *month(s)*	Improved	**1.6** *month(s)*
	Existing	**4.6**	**11.3** Jul-10	**5.2** Nov-15	**-0.4** *month(s)*	Improved	**0.6** *month(s)*
Construction activity (thousands)	**Housing starts**	**1,289**	**353** Mar-09	**768** Dec-15	**10.3%**	Improved	**-40.4%**
	Building permits	**1,257**	**337** Jan-09	**740** Dec-15	**6.9%**	Improved	**-41.1%**
Prices (index, Jan 2000 = 100)	**CoreLogic HPI w/distressed sales**	**115.7**	**137.3** Nov-11	**185.6** Nov-15	**5.1%**	Improved	**60.3%**
Housing affordability (NAR, index=100 when median family income qualifies for 80% LTV mortgage on a median priced home)		**127**	**101.1** Jul-06	**167.4** Nov-15	**-0.5%**	Weakened	**32.2%**
Sentiment							
Homebuilder (NAHB, over 50 means majority view conditions positively)		**59**	**8** Jan-09	**60** Jan-16	**7** *point(s)*	Improved	**1** *point(s)*
Home-buying conditions (Reuters/Umich, index = good time - bad time + 100)		**152**	**117** Oct-08	**157** Jan-16	**2** *point(s)*	Improved	**5** *point(s)*
Demographics							
Household formation (thousands)		**1113**	**100** 2008-Q4	**1447** 2015-Q3	**997** *thousands*	Improved	**334** *thousands*
Homeownership rate (percent)		**67.7**	**63.5** 2015-Q2	**63.5** 2015-Q3	**-0.2** *percentage point(s)*	Weakened	**-4.2** *percentage point(s)*

Residential investment continues to give a modest lift to GDP growth. Residential investment rose at an annual rate of 8.2 percent in 2015Q3, adding 0.3 percentage point to real GDP growth, matching the average contribution over the last four quarters. The available data suggest that residential investment is on track to make a positive (though somewhat smaller) contribution to growth in Q4.

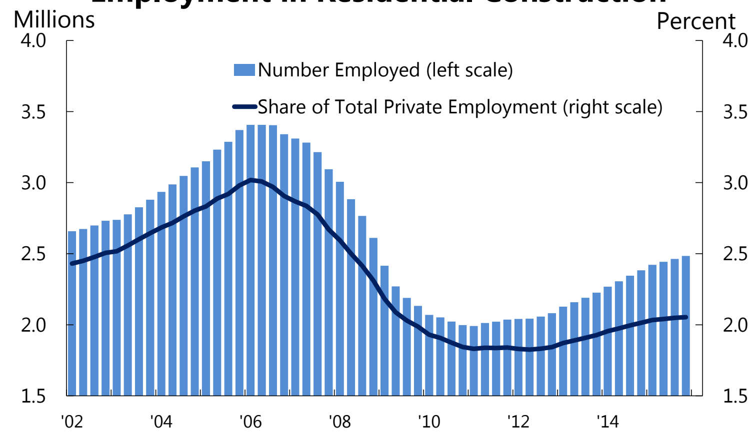
Residential Investment's Contribution to Real GDP



Source: Bureau of Economic Analysis

Employment in residential construction continues to recover. Over the past year, it has increased by 11,400 jobs per month, compared with 13,500 jobs per month in the year-earlier period. The level of employment remains relatively low: residential construction employment totaled just under 2.5 million workers in 2015Q4, accounting for roughly 2.1 percent of total private payroll employment, compared with around 2.6 percent in the early 2000s.

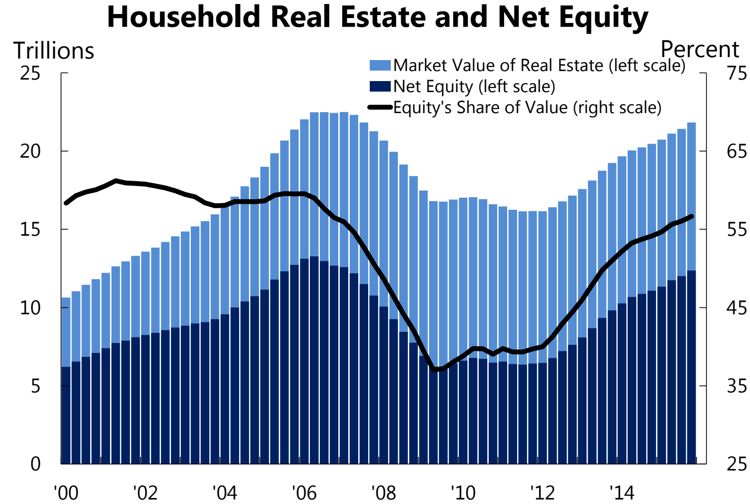
Employment in Residential Construction



Note: Includes those employed directly in residential construction as well as related specialty trades.
Source: Bureau of Labor Statistics

Housing wealth is nearing its earlier peak. The value of household real estate reached $22 trillion in 2015Q3, up from a low of $16 trillion in 2011Q4. The current level is close to its 2006Q4 peak, but the sustainable level is higher than in 2006 because of population-driven growth in the housing stock and overall inflation.

Household Real Estate and Net Equity

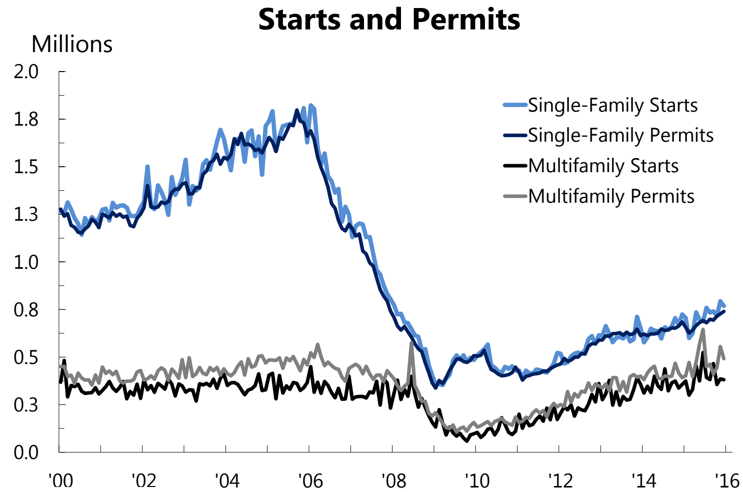


Source: Federal Reserve Board

Housing Starts and Inventories

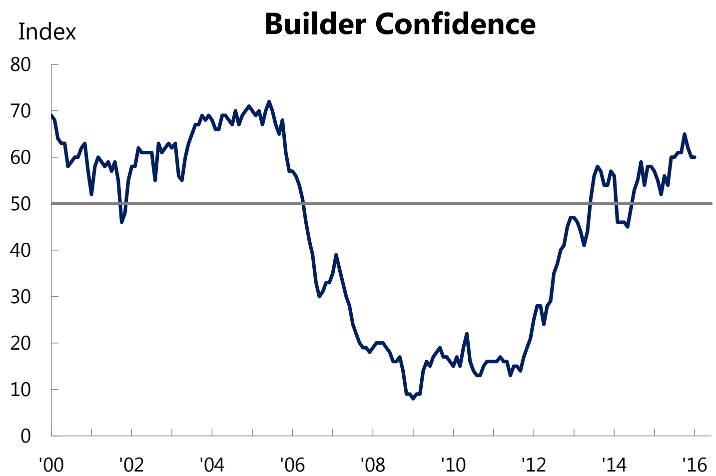
January 2016

New residential construction activity continues on its gradual upward trajectory despite some recent volatility. Single-family starts (light blue line) dipped and permits (dark blue line) rose in December. In the multifamily sector, construction activity is back in the range seen before the crisis, but the rapid rise in rents suggests that construction activity is not yet fully meeting demand.



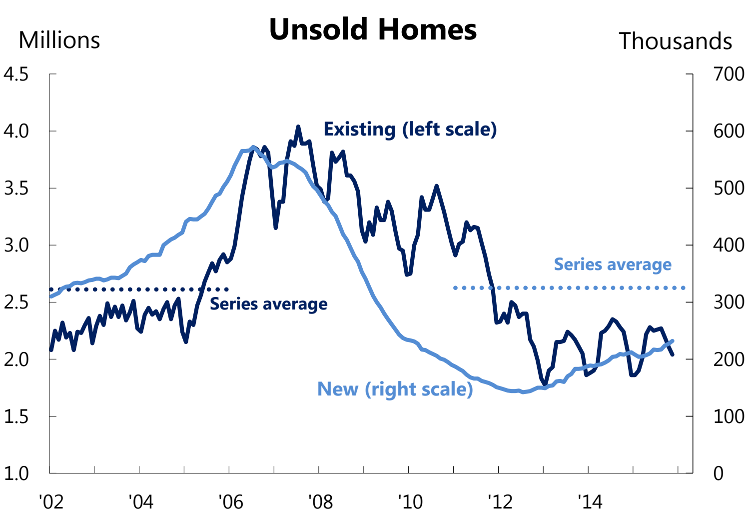
Source: U.S. Census Bureau

In January, builder confidence remained close to the 10-year high registered in October. The National Association of Homebuilders index has recorded readings above 50 (meaning a majority of builders view the market positively) for the last 19 months. All three of the index's components—sales expectations over the next six months, current sales, and buyer traffic—are above their 2014 averages.



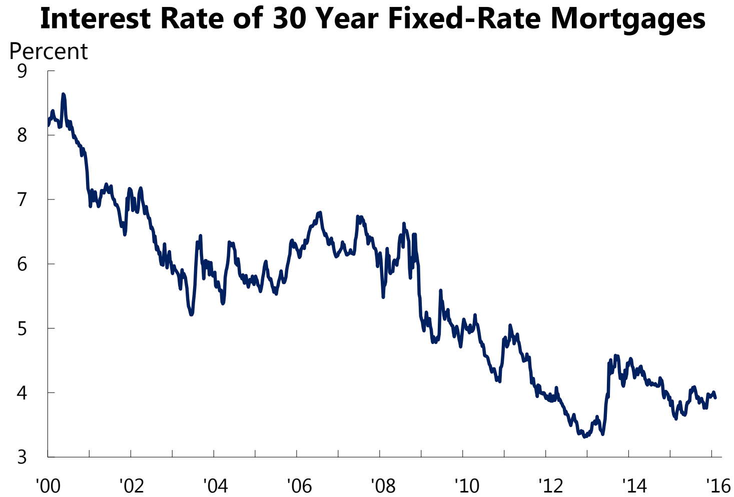
Source: National Association of Homebuilders

The inventory of homes for sale remains well below historical averages. The stock of existing homes for sale (dark blue line) was at 2.0 million units at the end of November, and the stock of new homes for sale (light blue line) was at 232,000. At the current sales pace, there is 5.1-month supply of existing homes available for sale; for new homes, the available inventory is equivalent to a 5.7-month supply.



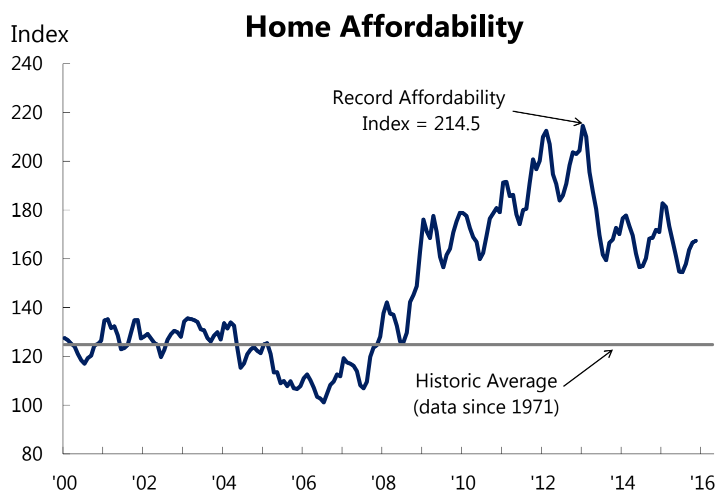
Source: National Association of Realtors and U.S. Census Bureau

Mortgage interest rates remain very low by historical standards. The average interest rate on new 30-year fixed-rate conventional mortgages was 3.92 percent in the week ending January 14. The current rate is only 61 basis points higher than the lowest rate recorded in 2012.



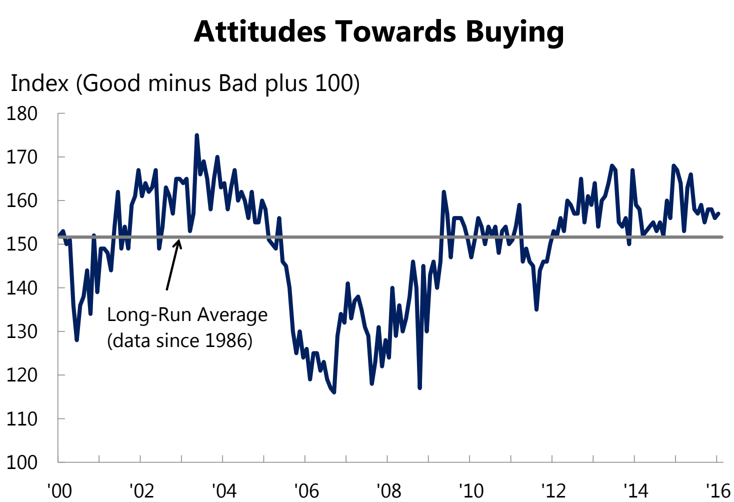
Source: Freddie Mac

The National Association of Realtors Housing Affordability Index suggests that housing remains affordable for the typical family. The index increased for the fourth consecutive month in November after falling to a 7-year low in July. The rebound in house prices accounts for much of the decline in affordability since its peak in 2013. (Note that the index assumes a 20 percent down payment; interest rates would be higher and affordability would be lower for a family that made a smaller down payment).



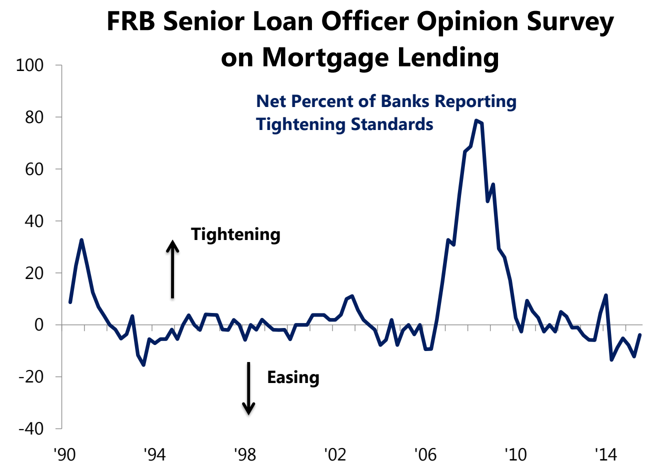
Source: National Association of Realtors

Households remain positive about home buying conditions. The University of Michigan Consumer Survey's "Good Time to Buy" Index remained higher than the long-term average in January. Low interest rates continue to be the main factor cited when respondents were asked why home-buying conditions are good. A small, but increasing, proportion of respondents cited future interest rate increases as a reason to buy now.

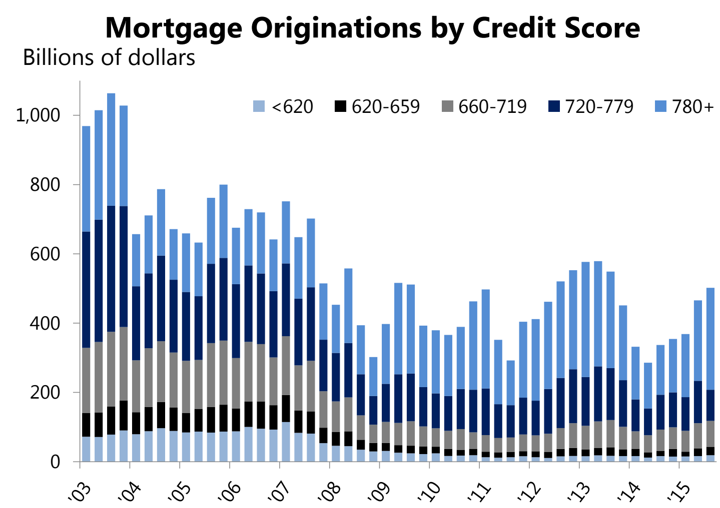


Source: University of Michigan Consumer Survey

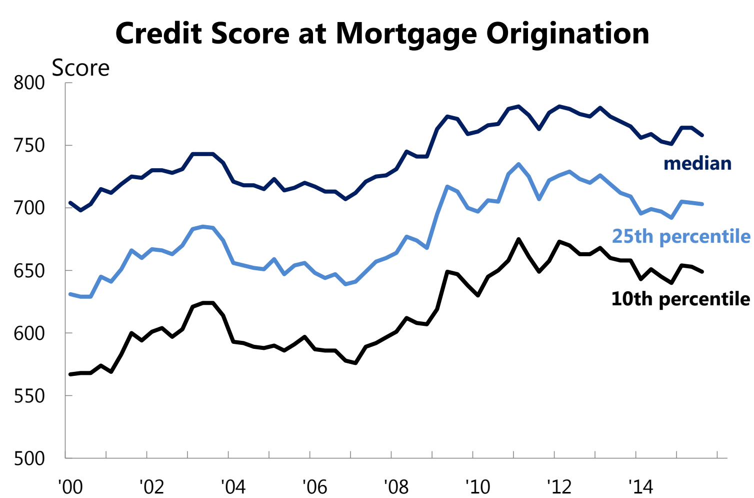
Senior loan officers at banks report easing of mortgage lending standards in recent quarters. The last few quarters mark the first period of sustained easing since the period of dramatic tightening during the financial crisis. (Note that the level of the line shown corresponds to the change in lending standards, with values below 0 representing an easing of lending standards and values above 0 representing a tightening).



Despite the easing, lending is still restrained, and riskier borrowers continue to have very limited access to mortgage credit. Mortgage originations have been rising over the past year, but the pick-up has been driven largely by borrowers with credit scores above 660. Originations by borrowers with credits scores below 660 are well below pre-crisis levels. Almost no mortgages are being extended to borrower with FICO scores below 620.

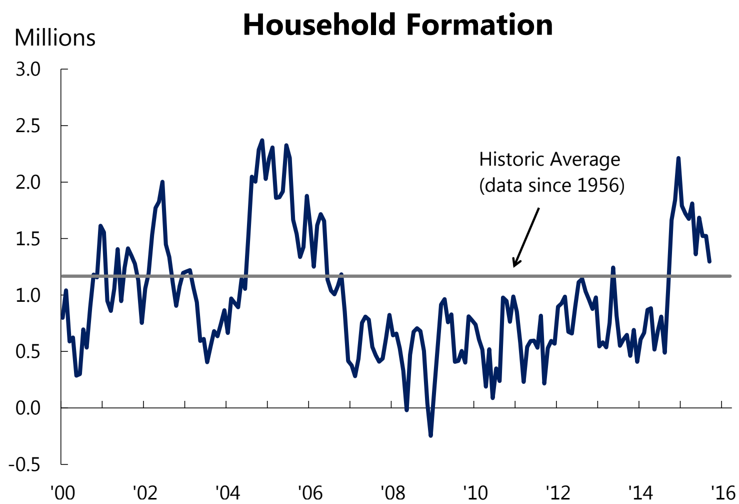


The median FICO score of newly originated mortgages is around 760, up from roughly 700 in the early 2000s. At the 10th percentile, the FICO score for new mortgages was 649 in 2015Q3, compared with less than 600 in the early 2000s.



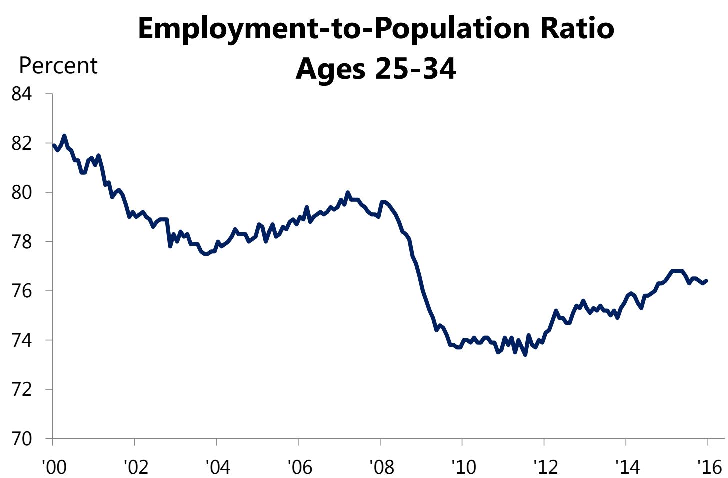
Source: FRBNY Consumer Credit Panel/Equifax
Note: Credit Score is Equifax Riskscore 3.0; mortgages include first-liens only.

Household formation has picked up. Between mid-2006 and 2014Q3, the rate of household formation averaged roughly half its historical average of 1.2 million per year. Household formation surged at the end of 2014. It has receded since then but remains above this historical average. In the year ending in September, 1.3 million households were formed.



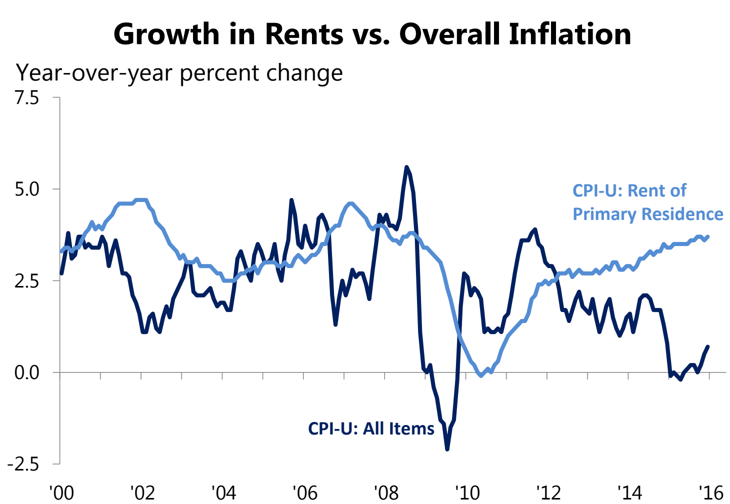
Source: U.S. Census Bureau, Treasury calculation

The proportion of young adults who are working has seen a partial recovery. The employment-to-population ratio for individuals ages 25-34 has reversed nearly half of the decline that occurred during the recession. The strengthening labor market should support household formation going forward.



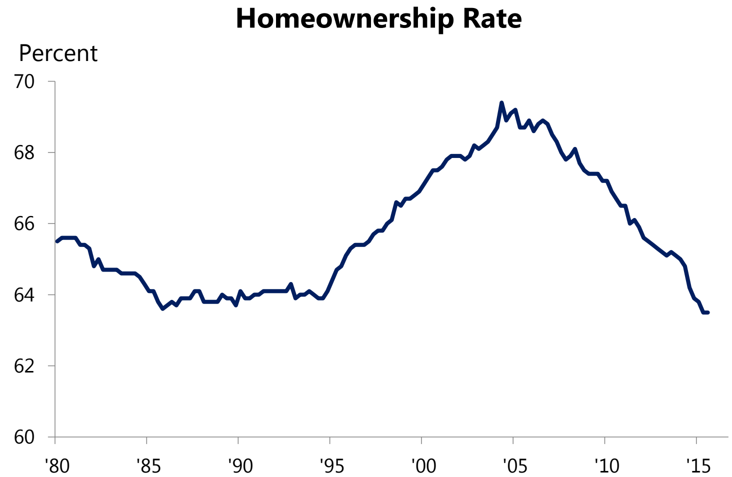
Source: Bureau of Labor Statistics

Higher rents are an obstacle to young adults establishing their own households. The supply of rental housing appears to have not risen as fast as demand and, as a result, rents have been increasing rapidly. They outpaced overall inflation by 3 percentage points over the year ending in December.



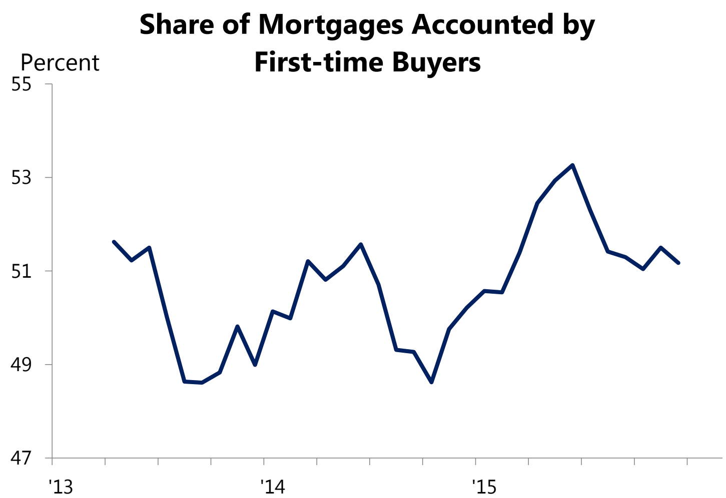
Source: BLS

The homeownership rate held steady in 2015Q3. The homeownership rate was unchanged at 63.5 percent in 2015Q3, the lowest reading since 1967Q4. The homeownership rate may decline further in coming quarters as household formation continues to recover because newly formed households are more likely to rent before purchasing a home.



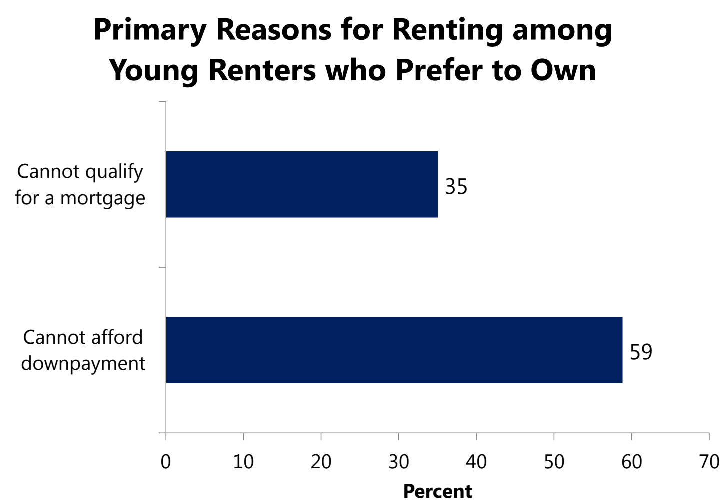
Source: U.S. Census Bureau

First-time home buyers account for around half of purchase mortgage originations. The share of newly originated mortgages going to first-time buyers was 51.2 percent in December. Smoothing through the normal seasonal fluctuations, the series appears to be on an uptrend—it was 50.2 percent a year earlier.



Source: American Enterprise Institute

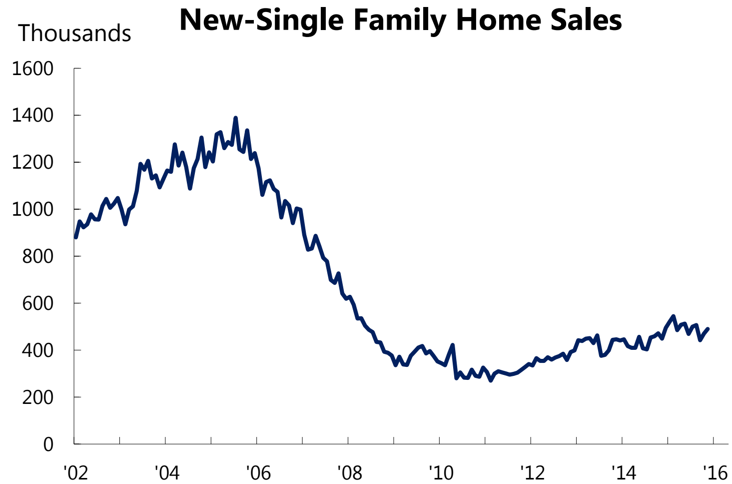
87 percent of households headed by young adults that are renting say that they would prefer to own if they could afford it. Of those households, the most commonly cited reasons for not owning are lack of downpayment (59 percent) and not being able to qualify for a mortgage to buy a home (35 percent).



Source: Report on Economic Well-Being of U.S. Households in 2014, Federal Reserve Board

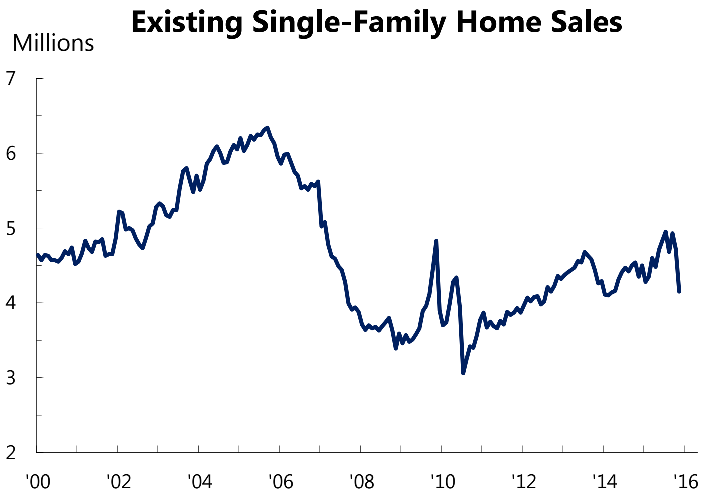
Home Sales

New single-family home sales have moved sideways in recent months but are above their levels of a year ago. At an annual rate of 490,000 in November, they were 11 percent above their average level in 2014. Still, the current pace of sales is still only about half the level seen prior to the boom in the early 2000s. (December data will be released on January 27.)



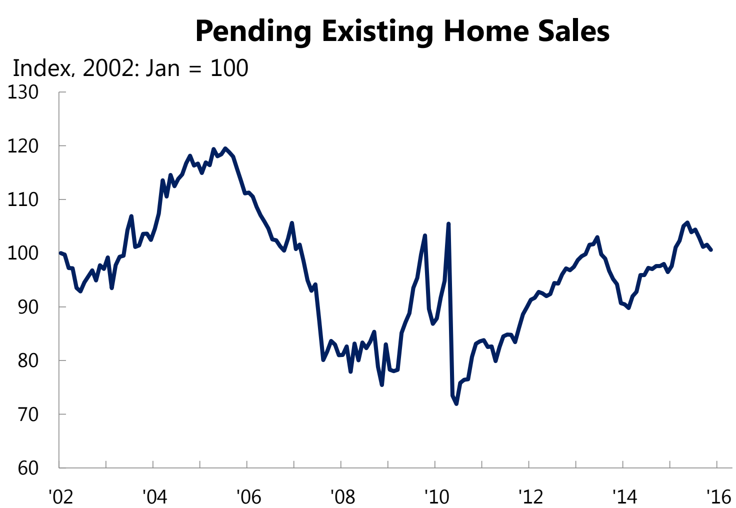
Source: U.S. Census Bureau

Sales of existing single-family homes tumbled in November due in part to new disclosure requirements for mortgages originated after October 1. The new requirements have reportedly increased the amount of time it takes to close on a sale. Accordingly, analysts believe that some sales were pushed from November into December and that the December value of this series will show a strong rebound. (December data will be released on January 22).



Source: National Association of Realtors

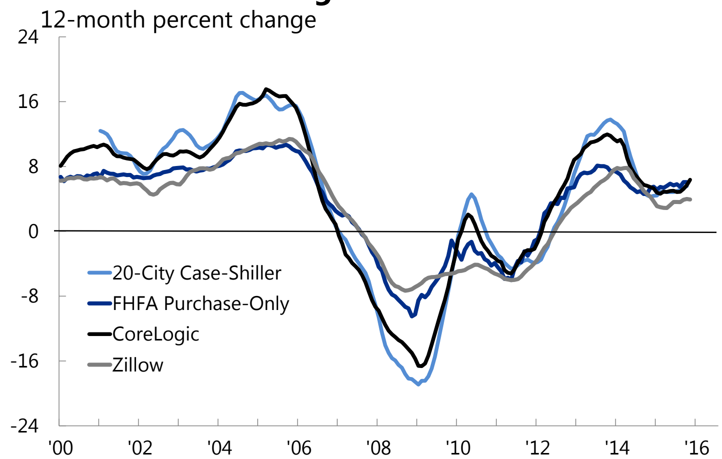
The National Association of Realtors index of pending sales of existing homes declined in November but was above its level of a year ago. The index is a leading indicator of existing home sales which are recorded at the closing of the sale. The National Association of Realtors is projecting that existing home sales will rise 1.5 percent in 2016.



Source: National Association of Realtors, Treasury Calculation

After rising at a high single-digit to low-double-digit pace in late 2013 and early 2014, the pace of home price appreciation has eased. Home prices are now growing at a more sustainable low-to-mid single-digit pace.

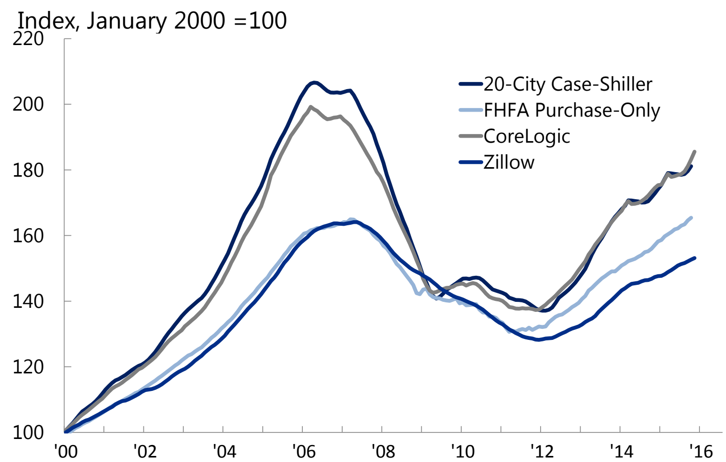
Changes in Home Prices



Source: Standard and Poors, FHFA, CoreLogic, Zillow

Home prices remain below their pre-crisis peaks. Most measures for the nation as a whole are currently around early 2005 levels. Forecasters generally believe that home price appreciation will remain moderate going forward. Participants in the 2015Q4 Pulsenomics/Zillow home price survey expect home prices to rise 3.9 percent over the four quarters of 2015, and 3.4 percent over the four quarters of 2016.

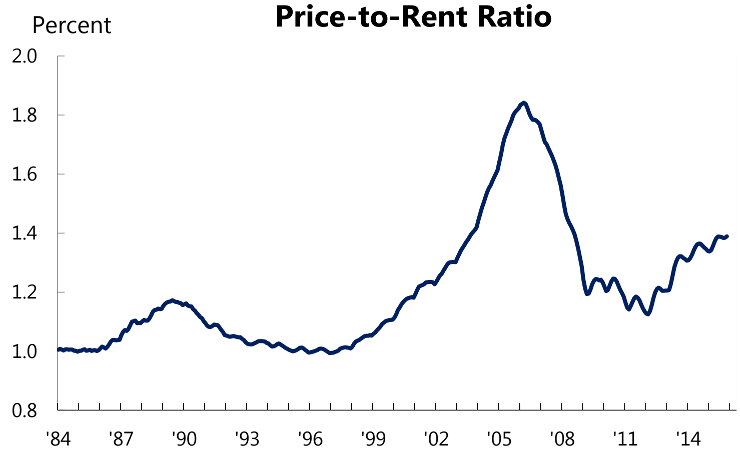
Home Prices



Source: Standard and Poors, FHFA, CoreLogic, Zillow

The ratio of home prices to rents, a common way to assess whether home prices are overvalued, remains well below its pre-crisis peak. That said, the substantial appreciation of home prices since late 2012 has pushed up this ratio, and it is now noticeably above its pre-crisis range.

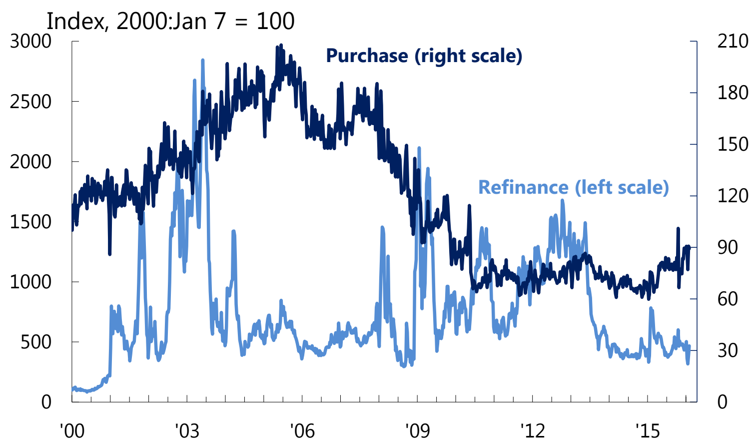
Price-to-Rent Ratio



Source: Ratio of CoreLogic National Home Price Index to CPI Owner's Equivalent Rent. Both Indexes set to 100 in January 1983.

Applications for home purchase mortgages have been volatile of late. The Fed rate hike and new mortgage disclosure requirements may have caused fluctuations in recent months. Purchase applications remain well below pre-crisis levels. Refinancing activity has been very low since mid-2013 as most borrowers who have been able to refinance have already done so.

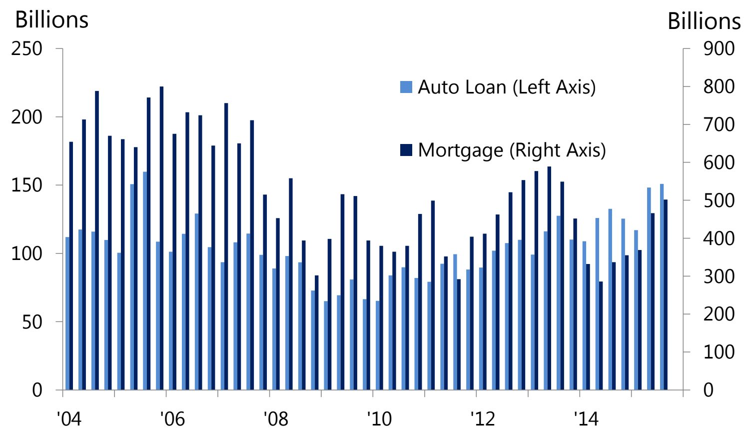
Mortgage Applications



Source: Mortgage Bankers Association

New mortgage originations have increased over the past year but remain low by pre-crisis standards. New mortgage originations rose to $502 billion in 2015Q3, up from a low of $286 billion in 2014Q2. The low level of mortgage originations stands in contrast to the pattern of some other forms of household credit, including auto loan originations, which have been increasing briskly along with sales and now stand near the top of their historical range.

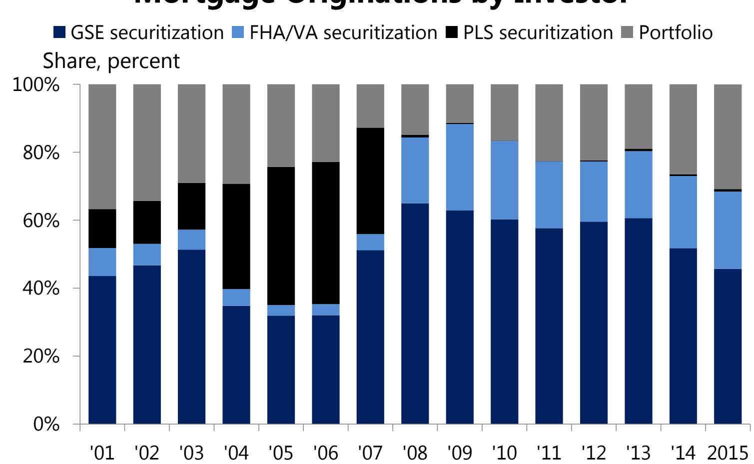
New Originated Installment Loan Balances



Source: Federal Reserve Bank of New York

The share of new mortgage originations backed by the government has fallen since its 2009 high, but remains significantly higher than pre-crisis levels. About 70 percent of new mortgages were backed by the FHA, VA, or GSEs in the first three quarters of 2015 (dark blue and light blue portions of bars). While bank portfolio lending has increased noticeably, the private-label mortgage-backed securities market has experienced essentially no recovery since collapsing in late 2007.

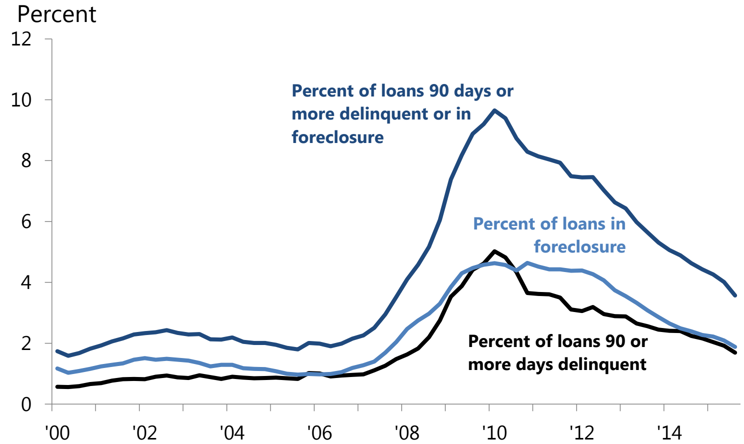
Mortgage Originations by Investor



Source: Inside Mortgage Finance and Urban Institute

Mortgage foreclosure and delinquency rates continue to normalize. The share of homes in foreclosure declined to 1.9 percent of outstanding loans in 2015Q3. The rate of mortgages in default (90+ days delinquent or in foreclosure) fell to 3.6 percent in 2015Q3, compared with a pre-crisis average of around 2 percent.

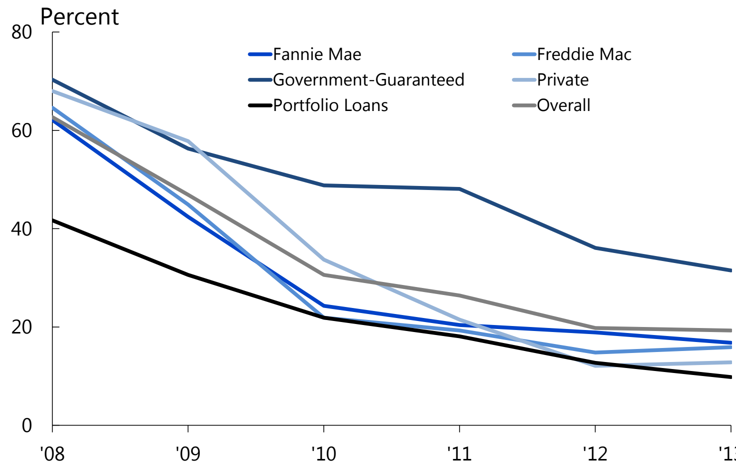
Foreclosure and Delinquency Rates



Source: Mortgage Bankers Association and Haver Analytics

Re-default rates for borrowers who have received a mortgage modification have run significantly lower for mortgages that were modified more recently. Mortgages that were modified in 2013 (24 months ago) had re-default rates that were between 32 and 55 percentage points lower than those modified in 2008.

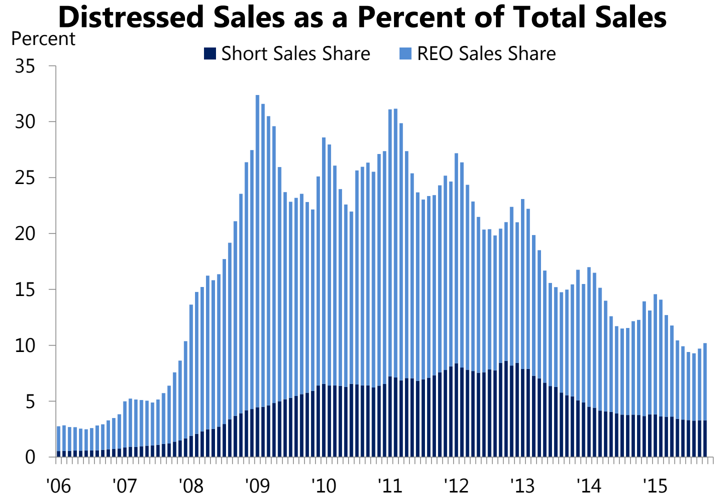
Re-Default Rate 24 Months after Modification



Source: OCC Mortgage Metrics Report for Q1-2015

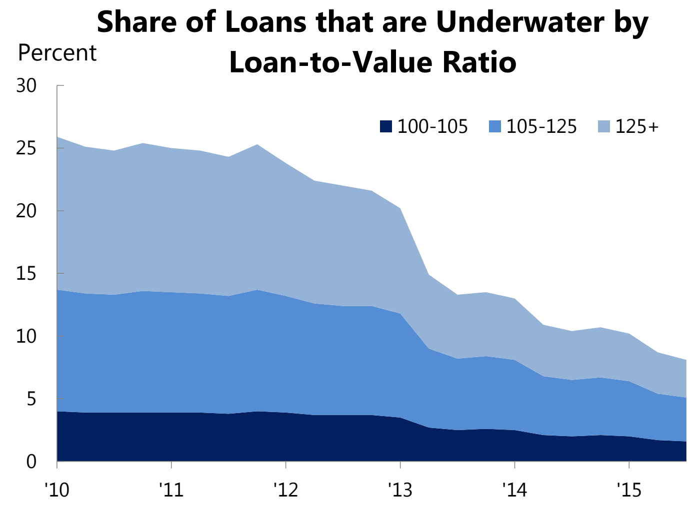
The shares of sales represented by REO sales and short sales have trended down over the past 3 years. In October 2015, REO sales made up nearly 7 percent of total sales while short sales remained around 3 percent.

Distressed Sales as a Percent of Total Sales



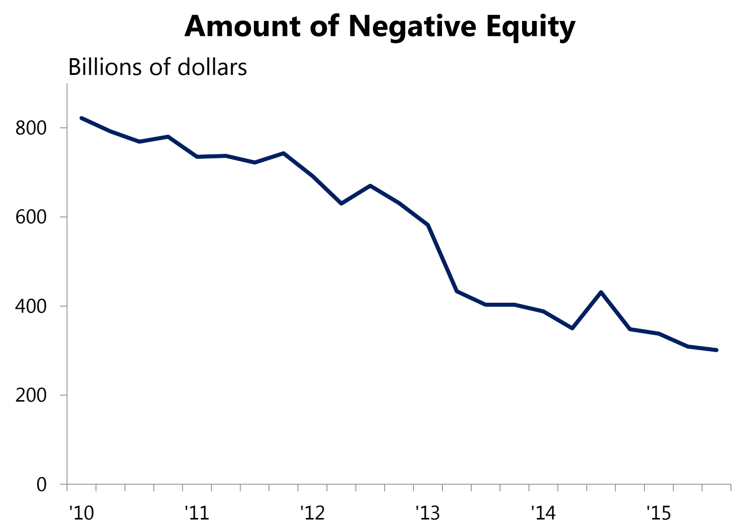
Source: CoreLogic

Rising home prices have greatly reduced the number of underwater borrowers. The share of mortgage loans with negative equity was 8.1 percent in 2015Q3, down from 10.2 percent in 2015Q1. The number of homes now underwater stands at 4.1 million, a 66 percent drop since the 2011 peak. Mortgages that are very underwater, with negative equity exceeding 25 percent, have declined and are now 37 percent of all underwater mortgages.

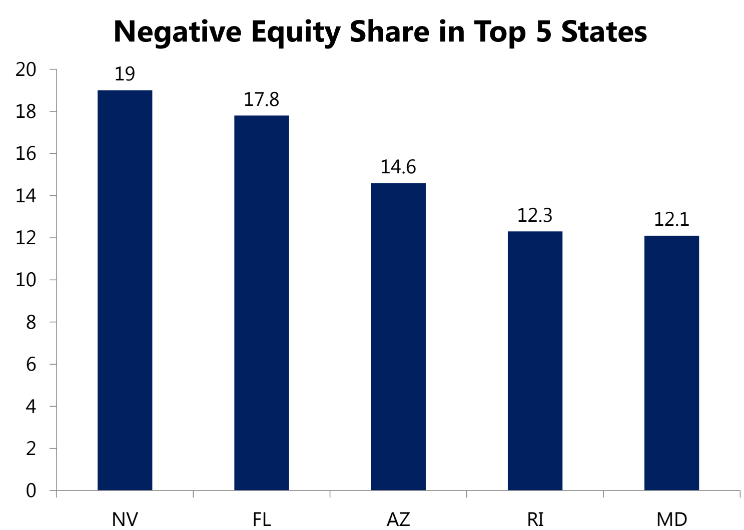


Source: CoreLogic Equity Report, 2015 Q2

The aggregate amount of negative equity continues to fall. Since 2010Q1, aggregate negative equity has fallen from over $800 billion to around $300 billion in 2015Q3.

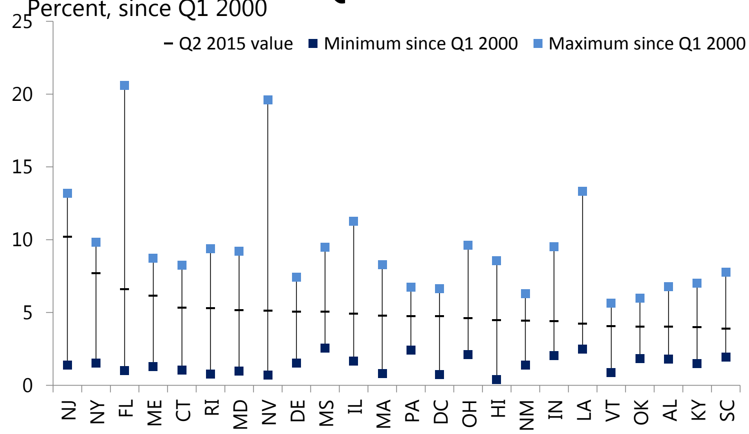


Negative equity rates are still very high in some states. Around 20 percent of mortgaged residential properties in Nevada and Florida still have negative equity. However, these rates have fallen by more than half in these two states since the beginning of 2013.



Serious delinquencies have fallen across the country but the degree of improvement varies by state. They remain near peak levels in some states, particularly in judicial foreclosure states such as New Jersey and New York. However, serious delinquencies are down nearly 64 percent from their peak in Florida, a judicial state that passed a law in June 2013 speeding up the foreclosure process. Serious delinquencies have also fallen markedly in hard-hit areas with flexible foreclosure laws, such as Nevada.

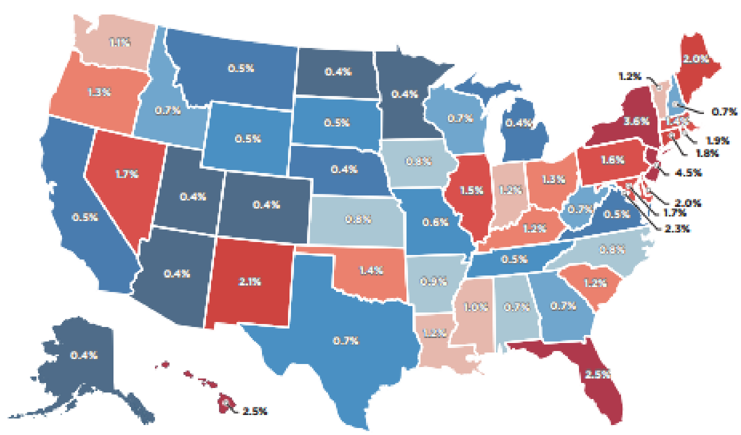
Serious Delinquencies for 25 Highest-Rate States: Q2 2015



Source: Mortgage Bankers Association/Haver

Foreclosure inventories have declined in many states but remain relatively high in others. Judicial foreclosure is an important factor: 13 of 23 states that employ the practice have noticeably elevated rates (shaded red). Other states with high inventories, like Nevada, are still struggling economically.

Foreclosure Inventories by State as a Percent of All Mortgage Homes



Source: CoreLogic Market Pulse, data as of October 2015