



Millennials Have Begun to Play Homeownership Catch-Up

Since the onset of the housing bust, bad news has inundated the homeownership market. The national homeownership rate has fallen to multi-decade lows, with decreases widespread across geographic areas and demographic groups. Homeownership declines have been particularly large among young adults. The homeownership rate of households headed by 25- to 34-year-olds was 36.9 percent in 2014, nearly 10 percentage points lower than in 2006, at roughly the peak of the housing bubble.¹ The young-adult homeownership decline has been associated with several housing market shifts, including low shares of first-time home buyers and suppressed starter home construction.

Recent data continue to show moderate homeownership rate declines for young adults², but analysis of change by age group provides only limited insight into the dynamic nature of homeownership. Valuable perspective can also be gained by tracking homeownership changes for birth cohorts in addition to age groups. That is, in addition to comparing the same age group with different people at two points in time, we should also track change for the same group of people as they grow older and pass from one age group to the next over their life cycle.³ Cohort analysis can be used to determine if Millennials have started to advance into homeownership at a faster pace as the economy and housing market have recovered, thereby beginning to reduce the homeownership rate deficits with prior generations that are evident in age group comparisons.⁴

Adopting this broader perspective, this *Housing Insights* uses the Census Bureau's American Community Survey (ACS) to examine young-adult homeownership rate change for both age groups and birth cohorts. It takes advantage of the ACS' huge sample to track changes for narrowly defined age groups and birth cohorts over very short periods of time, thereby isolating change during the housing market recovery from change during the housing bust and pre-crisis periods.

The traditional analysis of homeownership rates by age group reveals that young-adult homeownership continued to fall during the initial years of the housing recovery, albeit at a moderating pace. However, the cohort analysis shows that homeownership rate gains for young adults aging through their late twenties and early thirties accelerated significantly during the early housing recovery, a sign that the oldest Millennials have begun to mount a homeownership recovery and close the homeownership attainment gap with their predecessors.

Young-Adult Homeownership Rates by Age Continued to Fall During the Early Housing Recovery

A substantial benefit of the ACS is that its large sample permits reasonably precise estimates of characteristics for small population groups. In the case of housing tenure analysis, homeownership rates can be estimated with precision for very narrowly defined age groups. The use of narrow age groups permits analysis of homeownership rate differences over short intervals for successive, non-overlapping birth cohorts.⁵ In turn, the ability to measure differences over short intervals allows more precise delineation of history into distinct periods representing the housing boom, bust, and recovery. This *Housing Insights* divides recent history into the following periods: 1) the end of the 2000s housing boom and economic expansion (2006-2008); 2) the housing bust (2008-2010 and 2010-2012); and 3) the early housing recovery (2012-2014).⁶ The Appendix provides housing and economic data for each of these periods.

¹U.S. Census Bureau, American Community Survey, 1-Year Estimates, Table B25007: Tenure by Age of Householder.

² The Census Bureau's Housing Vacancy Survey reported that the homeownership rate for householders under the age of 35 was 34.2 percent in the first quarter of 2016, down 0.4 percentage points from one year earlier.

³ The cohort approach to analyzing and projecting housing consumption has foundations in John Pitkin and George S. Masnick, 1980, "Projections of Housing Consumption in the U.S., 1980 to 2000, by a Cohort Method," *Annual Housing Survey Studies No. 9*, U.S. Department of Housing and Urban Development, and John Pitkin and Dowell Myers, 1994, "The Specification of Demographic Effects on Housing Demand: Avoiding the Age-Cohort Fallacy," *Journal of Housing Economics* (3, 4): 240-250. The cohort perspective is sometimes used to project future changes in homeownership rates. For a recent example, see Dowell Myers and Hyunjung Lee, 2016, "Cohort Momentum and Future Homeownership: The Outlook to 2050", *Cityscape: A Journal of Policy Development and Research* (18, 1): 131-143.

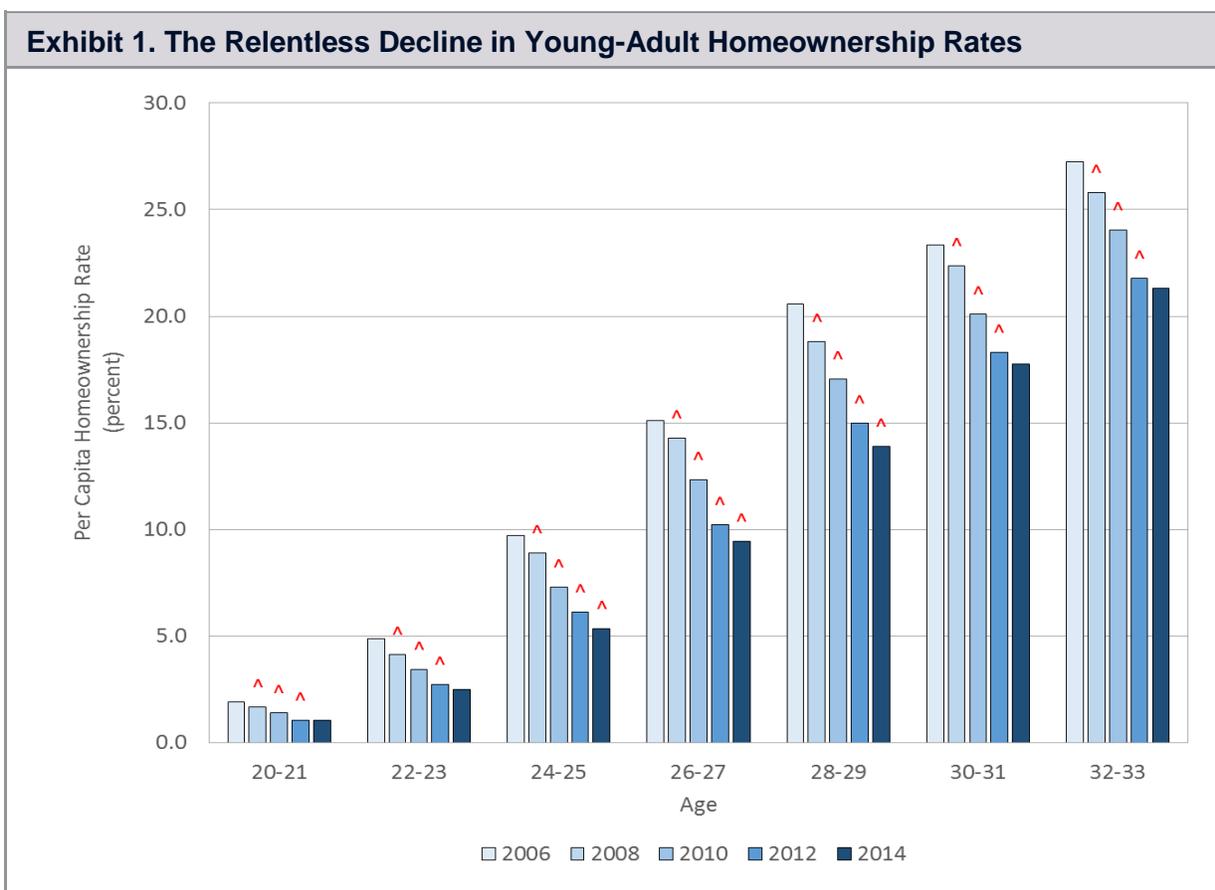
⁴ Generations are not consistently defined in the literature. For the purposes of this *Housing Insights*, Millennials are defined as those born between 1981 and 2000.

⁵ The width of the age group defines the historical time interval in between observations that is needed to compare successive, non-overlapping birth cohorts. In this analysis, two-year wide age groups are used, and thus homeownership rate changes are tracked over two-year intervals. For example, a comparison of the homeownership rate for those aged 20-21 in 2006 with the rate for the same age group in 2008 ensures that the entire birth cohort observed in 2006 has aged out of the category by 2008, and been replaced by the next youngest cohort.

⁶ 2014 is the most recent year for which ACS data are available.



Declines in per capita homeownership rates were pervasive for adults between the ages of 20 and 33 prior to the 2012-2014 early recovery period (see Exhibit 1).⁷ The homeownership rate for every age group shown in Exhibit 1 decreased significantly in each two-year period between 2006 and 2012. However, in a sign that the homeownership retrenchment among young adults might be abating, declines were not as large, nor as widespread, between 2012 and 2014. During this early housing recovery period, homeownership rate declines were statistically significant only for the age groups between 24 and 29. Even so, the data reveal no sign of an upturn in young-adult homeownership.



Source: U.S. Census Bureau, American Community Survey 1-Year Estimates. ^ Indicates that the per capita homeownership rate is significantly lower for a given age group than during the preceding period at the 90 percent confidence level.

The Oldest Millennials Experienced Accelerated Homeownership Gains During the Early Recovery

The moderation of homeownership rate declines by age group is promising, but it hardly suggests the beginning of a recovery. More definitive indications of a homeownership rebound are provided by the cohort analysis. Exhibit 2 tracks changes in homeownership rates for two-year-wide birth cohorts as they age through early adulthood. For example, the left-most bar in the exhibit shows that the cohort aged 20-21 in 2006 increased its per capita homeownership rate by about 2.2 percentage points as it aged to 22-23 years old in 2008.

As the housing bust and Great Recession took hold between 2008 and 2010, cohort advancement into homeownership slowed dramatically across the young-adult age spectrum. For those aging between 24-25 and 26-27, the homeownership

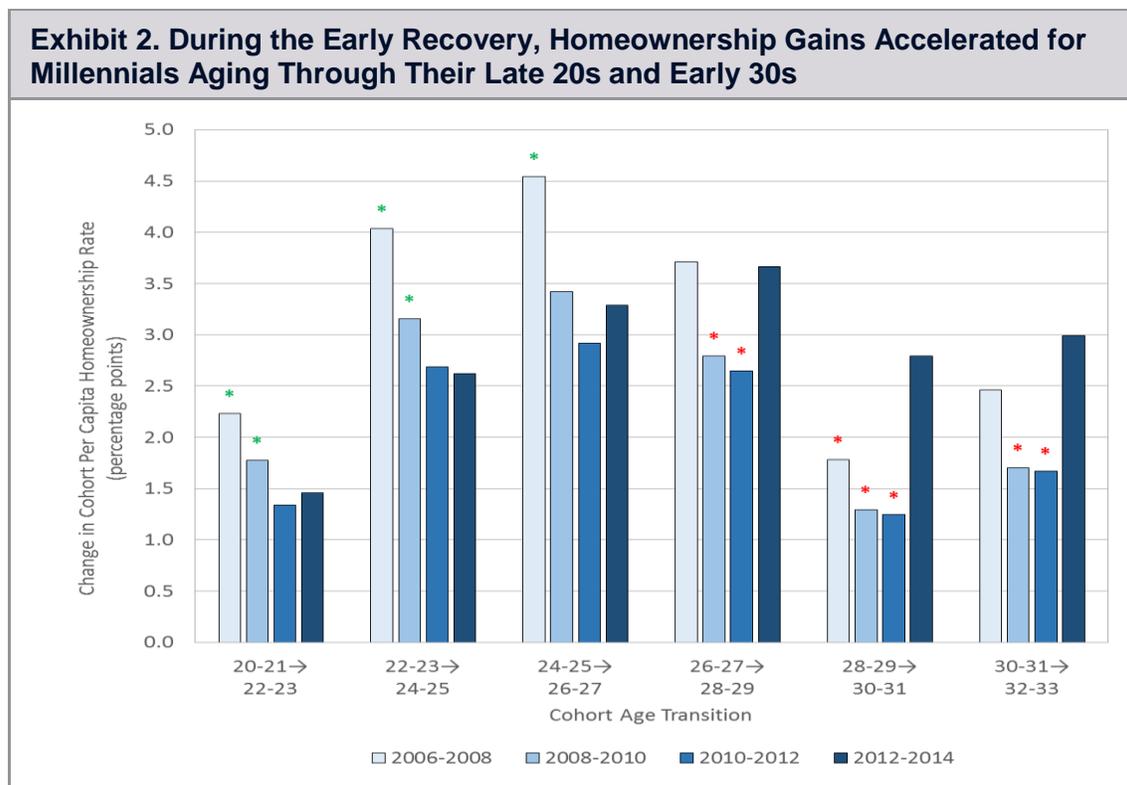
⁷ The per capita homeownership rate is the number of owner-occupant householders in a given age group divided by the total population in that age group. The householder is typically the person, or one of the persons, in whose name the housing unit is owned or being bought.



increment between 2008 and 2010 was less than 3.5 percentage points – a full point lower than the gain for the immediately preceding birth cohort making the same age transition just two years earlier.

Between 2010 and 2012, the magnitude of cohort homeownership gains continued to drop for most of the age transitions shown in Exhibit 2, but at a moderating pace. Indeed, for young adults aging through their late twenties and early thirties, homeownership rate gains largely stabilized during this period.

As the housing recovery began to take hold between 2012 and 2014, deterioration in cohort homeownership rate increments ceased for almost all of the age transitions shown in Exhibit 2. And for those Millennials who aged through their late twenties and early thirties between 2012 and 2014, homeownership rate gains were larger than the increments for predecessor cohorts passing through the same age range during the housing bust. The homeownership rate increment for those aging between 28-29 and 30-31 during the early recovery period was twice as large as it was for the predecessor cohorts during the housing bust, and was even significantly larger than it was for the cohort passing through this age range between 2006 and 2008.⁸



Source: U.S. Census Bureau, American Community Survey 1-Year Estimates. * Indicates that the cohort change for the given period is significantly greater (*) or less (*) than the 2012-2014 change for the same age transition at the 90 percent confidence level.

⁸ Note that the tests of statistical significance are performed differently for Exhibits 1 and 2. In Exhibit 1, the test measures if the homeownership rate in a given year for a given age group is significantly different at the 90 percent confidence level than it was two years earlier. All of the ^ symbols in this exhibit indicate that the homeownership rate in a given year was significantly lower than it was two years earlier. In Exhibit 2, all tests compare the cohort increment in the homeownership rate for a given age transition (e.g., for a cohort aging from 30-31 years old to 32-33 years old) during a given 2-year period with the homeownership rate change for the same age transition during the 2012-2014 period. In Exhibit 2, a green asterisk indicates that the change was significantly greater than in 2012-2014, whereas a red asterisk indicates that it was significantly less than in 2012-2014. For example, the left-most green asterisk in Exhibit 2 indicates that the homeownership rate gain experienced by the cohort passing from age 20-21 to age 22-23 between 2006 and 2008 was significantly greater than it was for the younger cohort passing through the same age range between 2012 and 2014. Conversely, the right-most red asterisk indicates that the homeownership rate increment for the cohort passing from age 30-31 to 32-33 between 2010 and 2012 was significantly less than the homeownership rate increase experienced by the cohort passing through the same age range between 2012 and 2014.



The Implications of a Millennial Homeownership Rebound

Millennials have homeownership rates today that are substantially lower than young adults prior to the housing bust and Great Recession. These homeownership attainment gaps are not immutable, however, and Millennials can play catch-up with prior generations as economic and housing market conditions improve.⁹

When applied to ACS data, the cohort analytical approach enables detailed comparisons of homeownership gains for successive cohorts of young adults during the housing bust and early recovery periods. It can provide indications of the beginning of a Millennial homeownership rebound that are not evident from traditional analysis of homeownership trends by age group.

Indeed, the cohort analysis presented here reveals that the recent homeownership rate gains of the oldest Millennials exceeded increases for their immediate predecessor cohorts, a sign of incipient recovery in young-adult homeownership demand. In turn, greater young-adult homeownership demand could signal growing needs for starter homes, affordable home purchase mortgage products, education and counseling efforts targeted at inexperienced homeowners, and other services and technologies suitable for youthful home buyers.

Accelerating young-adult homeownership attainment between 2012 and 2014 is particularly notable given that several factors weighed against a homeownership rebound during the early housing recovery. First, although labor market conditions had begun to improve for young adults between 2012 and 2014, their unemployment rate was still substantially elevated compared with the pre-crisis period (see Appendix table). Labor market conditions have continued to improve since 2014, thus providing additional support to young-adult homeownership demand. Second, credit conditions were very tight during the early housing recovery period.¹⁰ Although most credit availability indices continue to signal tight credit, several housing finance changes that are designed to expand credit access, particularly for first-time home buyers, have been introduced since 2014.¹¹ Finally, as the economic recovery has progressed, immigration has begun to rebound from the depressed levels of the Great Recession.¹² Because immigrants tend to arrive in the United States during early adulthood, and because they have very low homeownership attainment soon after arrival, the acceleration in immigration likely dragged slightly on the recovery in young-adult homeownership rates.¹³

Although improvements in the labor market improvements and credit access since 2014 should bolster Millennial homeownership demand, tight supply and rapid price gains in the lower tiers of the home sales market are reducing first-time home buyer affordability.¹⁴ Mounting affordability challenges at a time when the young-adult homeownership rebound is just beginning highlight the importance of continued industry efforts to provide housing and mortgage products that meet the needs of the growing number of potential young home buyers.

⁹ As noted by Myers and Lee (op cit), the youngest age groups are the most likely to respond to favorable changes in economic, housing market, and policy conditions and accelerate their pace of homeownership accumulation. Consistent with the findings of this *Housing Insights*, they argue that future cohort homeownership rate increments will likely increase relative to the depressed levels observed during the housing bust and Great Recession.

¹⁰ Housing credit availability indices from CoreLogic, The Urban Institute, and the Mortgage Bankers Association all show that mortgage credit was tight between 2012 and 2014 when compared with more “normal” historical periods.

¹¹ The Federal Housing Administration’s decision to lower annual mortgage insurance premiums in early 2015 and Fannie Mae’s and Freddie Mac’s expansion of low-down-payment loan offerings in December 2014 are just a few recent examples of government and industry efforts intended to expand credit availability, particularly for first-time home buyers.

¹² According to the Census Bureau’s Population Estimates Program, net international migration increased 14 percent from 2010-2012 to 2012-2014.

¹³ According to the 2014 ACS, the average age in 2014 of foreign-born persons who arrived in the United States between 2012 and 2014 was 29.7 years. The 2014 per capita homeownership rate of foreign-born persons who arrived during this period and were between the ages of 20 and 33 was only 1.4 percent, compared with a rate of 10.6 percent for native-born persons in this age range.

¹⁴ For additional discussion of supply and price dynamics affecting first-time home purchase affordability, see Fannie Mae Economic & Strategic Research Group, *January 2016 Economic and Housing Outlook: 2016: Affordability Constrains as the Expansion Matures*, January 11, 2016 (<http://www.fanniemae.com/portal/research-and-analysis/emma-archive.html>).



APPENDIX: Selected Housing and Labor Market Indicators by Period

Period	Average Annual Existing Home Sales (000s)	Average Annual 1-Unit Housing Starts (000s)	Average Annual Change in FHFA Purchase-Only House Price Index (percent)	Average Unemployment Rate for 20-34 Year Olds (percent)
2006-2008 (end of the boom)	5,135	1,026	-4.1	5.9
2008-2010 (bust)	4,340	484	-4.1	10.7
2010-2012 (bust)	4,221	451	-0.1	10.9
2012-2014 (early recovery)	4,922	606	6.5	9.0

Sources: National Association of Realtors®, Census Bureau, Federal Housing Finance Agency (FHFA), and Bureau of Labor Statistics. Data on home sales, housing starts, and the unemployment rate reflect two-year periods from July through June (for example, July 2006 through June 2008 for the “end of the boom” period). Annual home price change is measured from July to July (for example, July 2006 to July 2008).

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