SPECIAL REPORT

TD Economics

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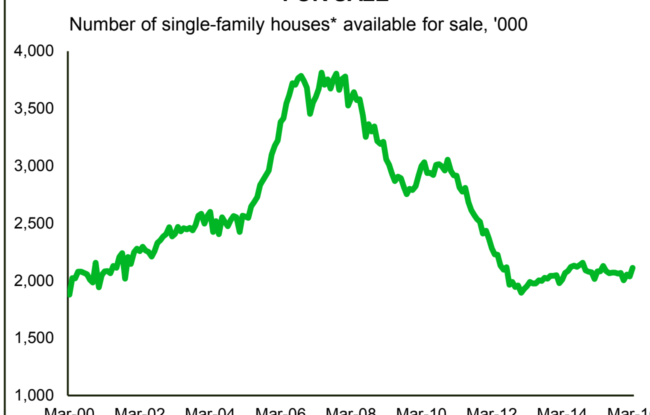
DIVERGING HOUSE PRICE RECOVERY LEADS TO MARKET GRIDLOCK IN THE U.S.

Highlights

- Recovering home prices were supposed to be the key that would ultimately unlock pent-up housing supply. While home prices are now nearing full recovery, the inventory of houses for sale has remained virtually unchanged since 2012.
- Much of the inventory shortage can be explained by housing market gridlock. Prices at different tiers of the market – such as entry-level, move-up, and premium homes – have been recovering at varying speeds, leading to increased divergence.
- Buoyed by investors' demand, prices for most affordable homes have recovered ahead of the other segments. Premium homes have also fared relatively well, since their owners were less likely to foreclose during the housing crisis. Meanwhile, the middle of the market has underperformed.
- This divergence in relative prices has impeded the transition of buyers from the move-up to premium segment, dampening overall activity. Meanwhile, first-time home buyers have been challenged by a low stock of entry-level homes, rapidly rising prices and stiff completion from investors.
- Making matters worse, new construction has been slow to recover, and any new supply has been generally targeted at the more expensive end of the market.

It has long been thought that recovery in home prices was the key that would ultimately unlock pent-up housing supply. As prices recovered, homeowners would be encouraged to sell in order to trade up or down, or to relocate as they emerged from the negative equity. Yet this theory has been slow to play out. At the national level, a complete recovery (at least in nominal terms) is now within arm's length. The Case-Shiller national home price index is only about 3% shy of its pre-recession peaks. Thanks to these price gains, the share of mortgages in negative equity position has fallen substantially; at the end of 2015, 8.5% of homeowners were under water, about one third of the peak levels reached during the housing crisis.[1] Despite this progress, the inventory of houses for sale has remained virtually unchanged since 2012, and is currently at the same level it was back in 2001 (see Chart 1). So what is holding back the inventory?

CHART 1: INVENTORY OF HOUSES AVAILABLE FOR SALE



*New and existing
Source: National Association of Realtors, TD Economics

A good part of the explanation relates to buyer and seller gridlock across many housing markets across the country. The

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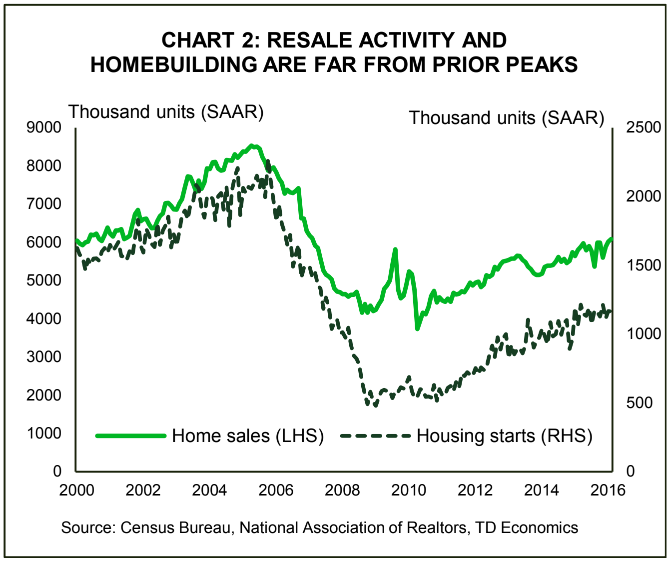
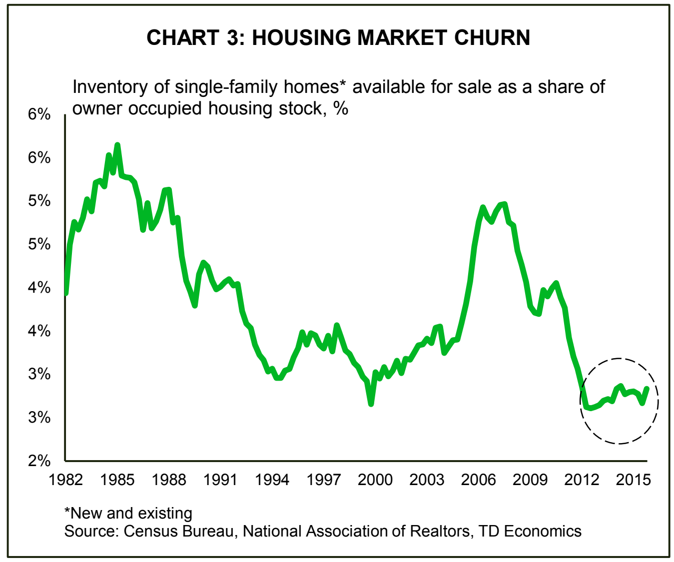




price recovery has not been uniform across the three major tiers of the housing market, notably the entry-level, trade-up and premium houses. Buoyed by investor demand, prices for the most affordable homes have recovered ahead of the other segments and are now above their pre-recession peak. Premium homes have also fared relatively well, since their owners were less likely to foreclose during the housing crisis. Meanwhile, the middle of the market has underperformed, making these homeowners reluctant to put their property on the market. This wide divergence in relative prices between move-up homes and premium houses has impeded the transition of buyers along the price curve, dampened sales and left overall resales inventory plumbing the depths. Due to a low stock of entry-level homes and stiff completion, first-time homebuyers are facing growing difficulties entering the market. Making matters worse, new construction activity has been slow to recover, and any new supply has been generally targeted at the more expensive end of the market.

The bottlenecks in the housing market are beginning to ease, as evidenced by a modest narrowing in relative price gaps in recent months. We believe that these trends will continue, driven by a number of key factors. Chief among them is rising employment and growing churn in the labor market, which should facilitate greater resale activity as people move to pursue new opportunities. Given the low inventory of entry-level homes, some first-time buyers may opt to save a larger down payment and fast track to the middle tiers, speeding up the price recovery there. New residential construction will also offer a greater reprieve. A tightening inventory of existing homes will entice more homebuyers to shop in the newly built market, which bodes well for homebuilders. More builders will likely be enticed to service the undersupplied market of starter homes, given the large demand and rapidly rising prices in this segment.

Lack of inventory keeps housing market in lower gear

The recovery in the U.S. housing market has proceeded at a relatively glacial pace. The resale activity and particularly new homebuilding remain shadows of their former selves (see Chart 2).

Discussion surrounding the slow nature of the housing market recovery has largely focused on demand-side factors, with particular focus on the decline in the household formation rate, reduced access to credit, lingering slack in the labor market, and the high level of student debt among millennials. However, with the economy now in its eighth year of expansion and with the labor market nearing full employment, these constraints are easing their grip. Credit scores are also gradually getting repaired. Foreclosure and other negative credit events stay on credit reports for up to seven years, a period that has passed (or will soon pass) for a rising share of those Americans that were affected. At the end of 2015, over 70% of households who went through a foreclosure had no evidence of that event on their credit score reports.[2]

With demand fundamentals becoming considerably more robust, the focus has been shifting to the supply side as the number one culprit keeping the housing market stuck in low gear. With pent-up demand for housing rising, the inventory shortage of houses for sale has become more apparent.[3] This was a recurring theme in existing home sales reports by the National Association of Realtors (NAR) for much of 2015 and so far in 2016, with the NAR repeatedly emphasizing that tight supply was hindering sales activity.

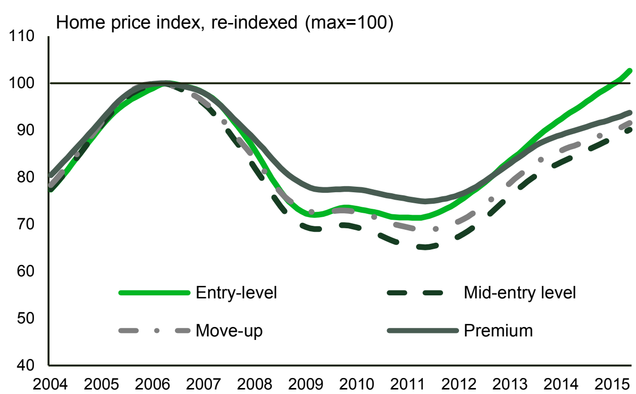
Measured as a share of total owner occupied housing stock, the number of single family homes available for sale remains near historic low (see Chart 3). A lack of available inventory means that potential homebuyers – either the first-time homebuyers or those wanting to trade-up – may not find that "dream home", at least not within their price point. The decision to continue renting or to stay put in their current house depresses the churn in the housing market.

Relative prices matter: gridlock in the middle

In order to explore this notion of buyer gridlock, we have examined the price recovery across four different price tiers of the housing market. Chart 4 shows that price recovery did not reach all corners of the housing market at the same pace. Purchase prices at the bottom end of spectrum (i.e., 75% or less of the median price) and top end (125% of the median) tiers have fared better, while the middle of the pack (within 25% of the median price in either direction) has underperformed. A similar price trend is also evident across many metropolitan areas (please see Text Box on page 4 for further details).

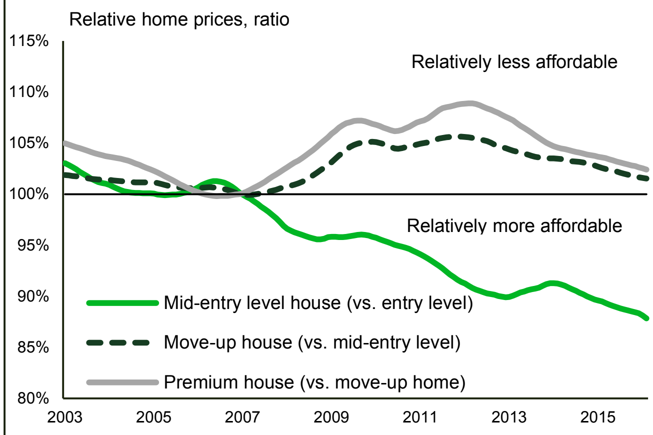
The strength of price appreciation at the bottom tier has been especially remarkable. Prices have already surpassed their pre-recession peak, supported by strong demand from investors, recovering demand from first-time and boomerang home buyers and lack of new construction. Meanwhile,

CHART 4: HOME PRICE RECOVERY BY PRICE TIER



* entry-level (price <= 0.75 of the median), mid-entry level (price >0.75 but <=1.00 median), move-up (price >1.00 but <=1.25 median), premium (price >1.25 median).
Source: CoreLogic, TD Economics

CHART 5: FOR OWNERS OF ENTRY-LEVEL HOMES TRADING UP BECOMES MORE AFFRODABLE



Source: CoreLogic, TD Economics

prices for premium homes – those in the top price tier – have also performed comparatively well, as the financial fortunes of wealthier homeowners held up better during the crisis and its aftermath. Price recoveries in the two middle segments have struggled. Not only was the downturn more severe in these two tiers, but the recovery has also been weaker, with prices still 10% and 8.5% below their pre-recession peak. This relative underperformance may discourage homeowners in these price tiers from selling their homes until further recovery, exacerbating the inventory shortage.

As a result, for owners of entry level homes it is now about 13% cheaper to upgrade to a mid-entry level house (see Chart 5) than it was prior to recession. However, it is actually more expensive for owners of mid-entry and move-up homes to move up a level.

These differences in price performance across various tiers are contributing to bottlenecks in the housing market. For first-time home buyers, rapid appreciation of home prices at the bottom tier and stiff competition with investors who often pay in cash makes it challenging to enter the housing market. Meanwhile, homeowners in the bottom tier, who benefitted from faster price recovery and may be ready to move up the housing ladder, may find it challenging to trade-up as homeowners in the middle tiers may not be in a hurry to sell until prices recover further. Faster price recovery for premium homes than for move-up houses makes premium homes relatively less affordable, discouraging homeowners at a lower tier from moving up the housing ladder.

While data on housing inventory by price tier are difficult

Text Box: Price divergence is also apparent at the metropolitan level

Differences in price performance observed at the national level are also apparent in many metropolitan areas (see Table 1). Among twenty metro areas that we examined, fifteen have seen a price recovery in the two middle tiers that has been weaker than in the top tier – in line with their performance at the national level. The only metropolitan areas where this was not the case were Charlotte, Virginia Beach, Washington, Dallas, and Houston. With the exception of Washington, neither of these metro areas is known as a hub of luxury real estate, which may explain the relative price underperformance at the premium tier. Prices for premium homes also did not outperform the middle tiers in Washington, with sequestration and government budget cuts likely taking some steam out of that segment of the market.

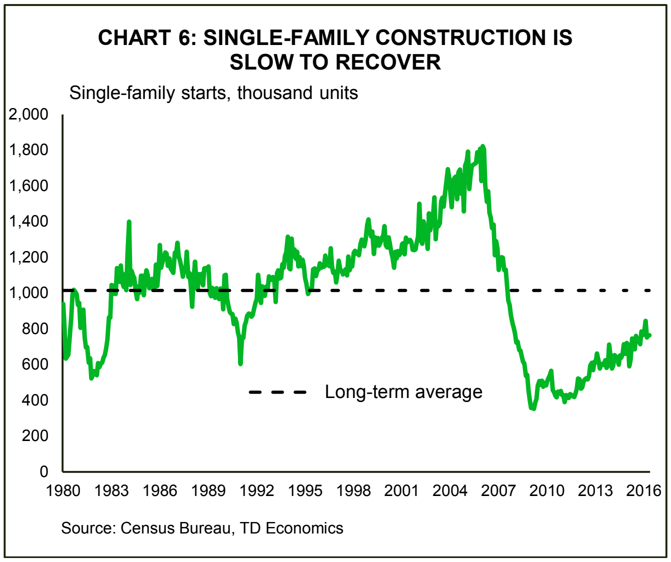
Also similar to the national story, price recovery in the bottom tier was generally stronger across the board. Home prices in the bottom tier outperformed the two middle tiers in thirteen metropolitan areas, and outperformed prices for premium homes in twelve. Nonetheless, there were some notable exceptions. In particular, the lowest price tier has underperformed in San Francisco, San Jose, Los Angeles, Las Vegas, Fort Lauderdale, New York, and Bridgeport. In all of these areas, home prices in the lowest tier were hard-hit during the recession, and the recovery was made weaker by the slow foreclosure process in a number of judicial states (NY, NJ, CT, FL) and anaemic economic improvement (CT, NJ). Additionally, significant income inequality in many of these metro areas (San Francisco, Los Angeles, New York, Bridgeport) has likely amplified divergence of fortunes between the top and bottom segments of the housing market.

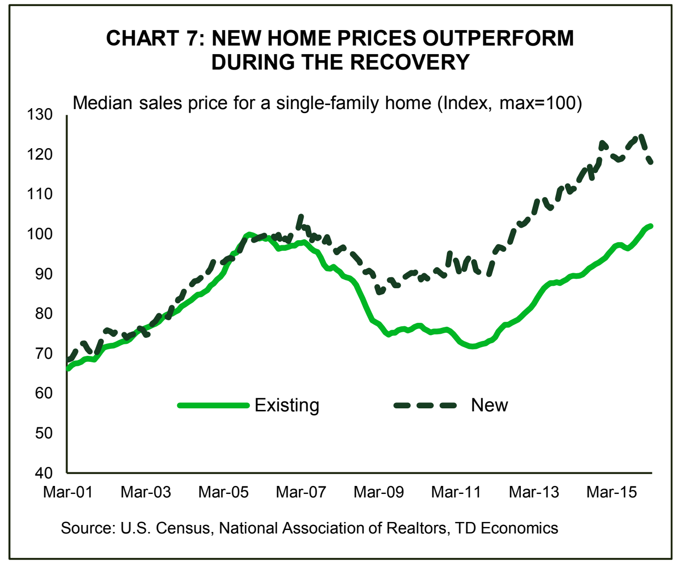
The inventory of single-family homes is also down from its year-ago level across most metropolitan areas, with the largest declines seen in Seattle, Boston, Charlotte, Orlando, San Diego, Tampa, Fort Lauderdale and New York. Low and falling inventory is particularly problematic in cities where the housing market is already very tight – such as San Francisco, Seattle, San Jose, San Diego, Los Angeles, Dallas and Boston. This is because the mix of rising prices and low inventory can create a self-propagating dynamic where potential sellers are dissuaded from listing their homes, thus putting further downward pressure on supply. On the other hand, falling inventory is a positive development in the housing markets where there is still substantial slack, such as Fort Lauderdale, Miami, Las Vegas, Naples, New York, Chicago and Philadelphia. This should continue to facilitate price recovery in these areas and gradually unlock housing supply as more properties emerge from negative equity position. Houston is the only metropolitan area in our sample where inventory is rising, up nearly 30% from a year ago, with a slowdown in the oil patch weighing on the local housing market. Fortunately, Dallas is faring much better, as solid demand for housing in this more diversified economy continues to draw down inventory, keeping the housing market fundamentals tight.

TABLE 1: HOME PRICE RECOVERY (PEAK-TO-NOW)

Home Price Tiers (as a share of the median price)	Fort Lauderdale-Pompano Beach-Deerfield Beach FL	San Diego-Carlsbad CA	San Francisco-Redwood City-South San Francisco CA	San Jose-Sunnyvale-Santa Clara CA	Orlando-Kissimmee-Sanford FL	Las Vegas-Henderson-Paradise NV	Los Angeles-Long Beach-Glendale CA	Miami-Miami Beach-Kendall FL	Naples-Immokalee-Marco Island FL	New York-Jersey City-White Plains NY-NJ	Houston-The Woodlands-Sugar Land TX
0-0.75	-34.3%	-9.4%	-8.1%	-0.5%	-23.6%	-33.8%	-15.2%	-13.9%	-28.7%	-21.2%	30.8%
0.75-1	-30.3%	-11.7%	18.7%	11.1%	-30.2%	-38.2%	-13.3%	-29.5%	-40.4%	-18.5%	18.3%
1-1.25	-24.6%	-9.9%	27.4%	16.7%	-30.3%	-32.6%	-8.4%	-26.9%	-36.9%	-14.8%	20.5%
1.25+	-23.3%	-6.6%	31.3%	20.1%	-29.9%	-30.8%	4.4%	-20.5%	-32.1%	-10.9%	19.2%
Home Price Tiers (as a share of the median price)	**Dallas-Plano-Irving TX**	**Chicago-Naperville-Arlington Heights IL**	**Seattle-Bellevue-Everett WA**	**Boston MA**	**Bridgeport-Stamford-Norwalk CT**	**Charlotte-Concord-Gastonia NC-SC**	**Tampa-St. Petersburg-Clearwater FL**	**Virginia Beach-Norfolk-Newport News VA-NC**	**Washington-Arlington-Alexandria DC-VA-MD-WV**	**Philadelphia PA**	**National**
0-0.75	26.8%	-12.8%	3.4%	4.6%	-23.6%	27.2%	-21.3%	2.2%	-4.8%	-1.8%	-1.8%
0.75-1	26.1%	-23.1%	1.4%	-3.7%	-13.4%	24.0%	-30.9%	-12.7%	-15.9%	-15.9%	-9.9%
1-1.25	23.6%	-18.5%	3.3%	-3.8%	-16.6%	12.2%	-27.6%	-14.3%	-15.7%	-15.8%	-8.5%
1.25+	16.7%	-17.2%	3.5%	0.4%	-4.8%	5.4%	-24.5%	-14.6%	-15.8%	-9.2%	-6.3%

Source: CoreLogic, TD Economics





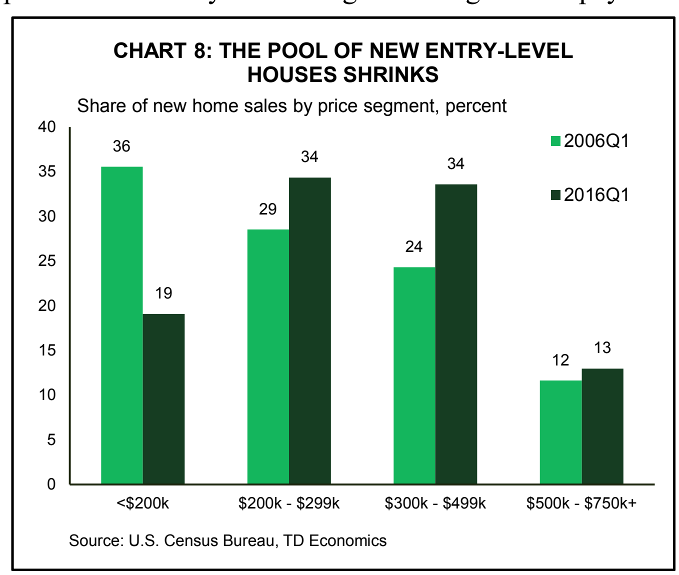
to come by, market reports suggest that these bottlenecks are real. A report by Trulia – an online U.S. real estate platform – finds that the inventory of starter homes (defined as homes with prices in the bottom third of the price distribution) has been shrinking at the fastest rate, falling by 44% since 2012.[4] The number of trade-up homes offered for sale also saw a substantial decline, dropping by 41%. Meanwhile, the number of premium homes has decreased by 33%.

Increased homebuilding did not lift all boats

A low inventory of houses for sale bodes well for homebuilders, who have been gradually ramping up construction. However, the pace of homebuilding has been slow to recover, bringing only partial relief to the undersupplied housing market. Single-family starts remain 25% below their long-term trend and 57% below their peak level (see Chart 6).

Moreover, new construction did not reach corners of the market where inventory shortage is most acute, such as starter homes. The share of more expensive houses has increased substantially in the aftermath of the recession as builders aimed to cater to wealthier buyers; meanwhile construction of starter homes has dwindled. The share of new homes built in the bottom third of price distribution shrank from 16% of the market in 2000 to 7.9% by 2015. On the other hand, the share of new homes at the top of the price distribution grew from 57% in 2000 to 69% last year.[5] As a result, relative prices of new and existing homes have diverged. A median new home now costs 30% more than the existing home, compared to 10% premium prior to the recession (see Chart 7).

So far the benefits of increased homebuilding have been largely accruing to buyers with larger budgets. Meanwhile, reduced availability of new houses at the low end of the price spectrum exacerbate challenges faced by first-time homebuyers, keeping them on the sidelines. At the end of last year, the median price that the first-time buyers paid for a house was around $190k – bouncing back from recession lows to the same level it was at the end of 2006. However, while the first-time homebuyers' willingness to pay has recovered, the pool of new houses which fit this bill is now considerably smaller. At the start of 2006, 36% of the new houses sold were priced below $200k compared to 19% now (see Chart 8). Consequently, more first-time homebuyers now have to shop for a house in the resale market, where the inventory of starter homes is also very tight, or to postpone purchase until they save enough for a larger down payment.



This helps to explain why new home sales remain depressed, accounting for just 10% of total activity – down from 17% prior to recession.

Market forces will nudge relative prices back to balance

It will not happen overnight, but bottlenecks in the housing market will begin to gradually ease as home prices in the middle tiers make further progress. Indeed, recent price trends suggest that this process has started. Given the limited inventory and stiff competition for entry-level homes, first-time buyers may be forced to skip the entry level homes altogether, save a larger down payment and fast track to a higher priced tiers. This, in turn, will help to speed up price recovery in the middle tiers of the market. Additionally, price growth in the premium segment has been slowing given the more ample inventory. This means that with time, affordability of premium homes relative to those in the middle tiers will improve, making the upward transition from the middle tier more viable.

Low inventory of existing homes for sale and improving household finances continue to spur demand for new houses, which augurs well for homebuilders. Given the severe shortage of starter homes and rapidly rising prices, some homebuilders may choose to serve this undersupplied segment, at least in the locations where the cost of construction is relatively low, making homeownership more feasible for the first time homebuyers.

That being said, first-time homebuyers and those looking for affordable housing will likely continue to face challenging environment in the near future, marked by high prices, significant competition and low inventory. While there is no single solution to address the difficulties faced by first-time homebuyers, a number of measures should help. Among them is the reduction of down-payment requirements and lower mortgage insurance premia for first-time buyers implemented by Fannie Mae, Freddie Mac and the Federal Housing Administration.

Rising churn in the labor market will also help to increase activity in the housing market, since relocation due to a new job is one of the most common reasons for purchasing a house. With voluntary quit rates on the rise and interstate migration improving, increasing mobility within the job market and across state and city lines will translate into higher activity in the housing market.

Over the longer term, supply of single-family homes should improve as a result of downsizing among baby-boomers. However, recent research suggests that seniors are staying longer in their homes[6] and begin to downsize in their late seventies –a mark that the first cohort of baby boomers will not reach for another five years.[7]

Bottom Line

While U.S. home prices are now within a hair of full recovery, this bird's eye view is not telling a full story. Taking a more holistic approach by looking at various segments of the housing market reveals an uneven recovery. Prices at different tiers of the market – such as entry-level, trade-up, and premium – have been moving at varying speeds. Boosted by investor demand, prices at the bottom tier have recovered briskly, while those in the middle tier have underperformed. Since most home sellers are also home buyers, changes in the relative prices across segments has impacted the ability of households to move seamlessly from one tier to the other, leading to gridlock, lower housing inventory and depressed churn in the market. Additionally, home values remain substantially underwater in regions disproportionally affected by the subprime crisis, making owners there reluctant to sell.

All in all, over time bottlenecks in the housing market will begin to ease as market forces and rising construction bring relative prices back into balance. Still, a recession leaves long-lasting scars, and the recovery in the housing market – both on the demand and supply sides – will continue to be a slow process. Research has shown unemployment and especially long spells of unemployment – a reality of a large number of people during the last recession – significantly reduce the probability of homeownership. In fact, the gap in homeownership rates between people who experienced unemployment and those who did not does not fully closed even after 10 years.[8] This suggests that even though the unemployment rate is approaching its long term rate and the home price index is nearing its pre-recession peak, complete recovery in the housing market may still be years away.

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