DO MILLENNIALS WANT TO BUY SINGLE-FAMILY HOMES?
ANALYZING THE CASE FOR A STRUCTURAL SHIFT IN HOUSING DEMAND
AND ITS POTENTIAL IMPACT ON THE TIMBER MARKET

Chung-Hong Fu, Ph.D., Managing Director
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Introduction

Timberland investors pay attention to the United States housing market because it is the leading source of lumber consumption. In 2014 new residential construction accounted for 30 percent of total softwood lumber demand in the U.S. During periods of stronger growth, the new home construction sector’s share of the lumber market has typically reached 35 percent or higher.

From the perspective of housing-driven demand, there is good news and bad news for timberland investors. The good news is that the U.S. housing market is on a slow, but steady, road to recovery. Since the housing crisis, which began in 2006, new home construction starts have increased 81 percent from a low of 0.55 million units in 2009 to 1.0 million units in 2014. Furthermore, the market is on pace to achieve an additional 10 percent gain in 2015 (Figure 1). The bad news is that much of this growth has come in the multi-family home sector, which includes apartments, townhomes and condominiums. This segment of the housing market grew more than 200 percent between 2009 and 2014. By comparison, the single-family home construction segment saw a relatively modest recovery of 48 percent. At present, one in three residences being built in the U.S. is a multi-family structure. By comparison, prior to the housing crash, multi-family homes accounted for one in five new homes being built in the United States.

![U.S. Housing Starts](image_url)

**Figure 1.** U.S. housing starts illustrated by rates of single-family and multi-family home construction. Percentages reflect the shares of single-family and multi-family homes to total starts. *Source: U.S. Census Bureau*
This home building trend is important to timberland owners because it has an impact on total timber demand. RISI expects that in 2017 new home construction will account for 37 percent of total lumber demand. Sixty-nine percent of this total is projected to be supplied by U.S. sawmills (Figure 2), which will consume 64 percent of the total U.S. softwood sawtimber harvest in response to this demand. However, a typical single-family home uses approximately 15,000 board feet of lumber and 12,000 square feet of other wood products, such as plywood and oriented strand board (OSB). By comparison, a new multi-family home requires only one-third these amounts. To further quantify these metrics, a 30 percent increase in single-family housing starts (based on Figure 2) would roughly generate a 6 percent increase in demand for softwood sawtimber in the U.S., which would be enough to boost sawlog prices in the major timber markets of the Pacific Northwest and the South. In contrast, a 30 percent increase in total multi-family starts would only cause sawtimber demand to increase by 1.3 percent. Therefore, increasing rates of single-family home construction have a far more compelling impact on timber prices than do increasing rates of multi-family home construction.

The primary reason the share of single-family starts among new home construction has declined is that rates of home ownership have fallen (Figure 3). The U.S. Census Bureau reported that the homeownership rate had dropped to 63.5 percent during the third quarter of 2015, the lowest level since 1994. With fewer families and individuals buying and owning their own homes, the number of households living in rental units has increased dramatically. This trend has driven the recovery of the multi-family home construction sector, particularly in the apartment segment. In fact, on a percentage basis, the number of new apartment units being built in the U.S. is at its highest level since the mid-1980s.
The issue that should be of interest to timberland owners and investors is whether this shift towards multi-family home construction is indicative of an emerging “megatrend.” In other words, are apartments starting to replace detached housing units as the residence of choice for a growing segment of the U.S. population? If the answer is yes and this trend is the result of a shift in cultural attitudes towards renting and urban living, then it is likely to be long-lasting, or even permanent. However, if it is due to challenging economic conditions, conditions that are unlikely to persist over the long run, then a rebound in single-family starts is likely to occur as the economy improves and evolves.

The remainder of this paper explores the fundamental forces driving the growth of the apartment construction sector relative to the traditional single-family home sector. We specifically evaluate whether the trends referenced above represent a structural shift in the housing market and what this could mean for timberland investors.

**Millennials are Crucial to Future Housing Demand**

The lynchpin of the U.S. housing market is the first-time home buyer. After the housing market collapsed in 2006, the first-time home buyer essentially went away. The share of starter homes priced below $200,000 among sales of newly built homes in the U.S. fell from 55 percent to less than 30 percent. In fact, as of this writing, the National Association of Realtors was reporting that the ratio of first-time home buyers in the U.S. fell to 32 percent in 2015, the lowest level since 1987. By comparison, in the past, the long-term average was 40 percent.

First-time home buyers are critical for a healthy market because of the “ladder” effect (Figure 4). A household is formed when a young adult moves out of his or
her parents' home and into a rental unit. From rental housing, one typically moves into a starter home. From that starter home, one eventually moves into bigger or different homes as his or her family grows and its needs change. Traditionally, when a household moves from a rental unit into a single-family home, that rental space becomes available to others. Likewise, when renters enter the housing market, they provide the impetus for those who are already owners of "starter homes" to move into larger and more expensive homes.

Hence, the "ladder" effect has traditionally been a recognizable and reliable driver of the housing market. However, as the number of first-time home buyers has declined recently, a bottleneck has developed. Demand for multi-unit rentals has soared while demand for single-family homes has fallen. This is why the current generation of young adults, who are known as "Millennials," are a key demographic for the housing sector. Born between 1980 and 1999, they are entering the family formation phases of their lives, when they normally would be expected to purchase their first homes.

The Millennial generation is of considerable influence in the housing market because of its sheer size. As Figure 5 below demonstrates, Millennials have surpassed the "Baby Boomers" as a percentage of the total U.S. population. In fact, by the end of this decade, they will make up 36 percent of all adults in the country. In other words, one-in-three adult Americans will be in the age bracket in which Americans have traditionally purchased their first homes.

**Figure 5.** Estimated population of the United States by year of birth as of 2014 where the named generations are delineated. *Source: U.S. Census Bureau*
Given Millennials’ potentially outsized influence on the housing market, it is important to understand their current motivations for choosing multi-unit housing living arrangements rather than detached, single-family homes. If the choice is cultural, then their actions and behaviors will persist and re-shape the U.S. housing market over the long-term. If, on the other hand, their preferences for housing are similar to those of their parents, we can confidently expect that demand for single-family home construction eventually will recover to historic levels as economic conditions improve and evolve.

Economic Pressures that Push Millennials to Choose Rentals

In the wake of the recession that began in 2008, a number of economic factors have kept Millennials from purchasing their first homes. These factors include:

- New job seekers, and those early in their careers, have faced weak employment and low wage gains
- Job growth has occurred primarily in metro areas that have a high cost of living and limited stocks of affordable housing
- Credit has been tight and underwriting standards have been conservative
- High levels of debt (college loans) and high rents have resulted in low savings rates

Weak Job Market and Low Income Growth

One of the largest impediments to young adults buying homes has been the weak job market. Many new job seekers have been unable to find full-time work and those who are early in their careers have faced advancement challenges. In addition, young workers have not benefited from steady income gains. The chart in Figure 6 illustrates that following the last recession the U.S. job market was most challenging for workers between the ages of 19 and 34. For instance, the unemployment rate for those between the ages 20 and 24 reached 18.1 percent in 2011 – this at a time when the national average was 8.9 percent.

![Average U.S. Unemployment Rate by Age Group](chart.png)

**Figure 6.** The annual average unemployment rate across different age groups for 2011, 2013 and 2015 year-to-date through October. *Source: U.S. Bureau of Labor Statistics.*
Instead of rising, real earnings and overall compensation levels for many young adults actually fell during the last five years (Figure 7). From 2011 to 2015, and when adjusted for inflation, the median annual income for full-time workers between the ages 25 to 34 actually dropped from $41,889 to $40,239. In short, Millennials who have wanted to buy homes have been less likely to do so because they have not been able to accumulate the savings required to make down payments and to shoulder mortgage obligations. This is because their full-time employment opportunities have been limited and their income growth potential has been curtailed.

**Job Growth Concentrated in Expensive Metro Areas**

Another major impediment to home ownership among prospective first-time buyers has been that employment growth for young adults has largely occurred in metro areas that have a high cost of living and limited stocks of affordable housing. Cities like San Francisco, New York and Boston, in particular, which have attracted many Millennials with new job opportunities, are also expensive places to live. According to Trulia, a real estate data provider, Austin, Honolulu and San Diego are also among the top 10 metro areas with the highest concentrations of Millennials.¹ In 2014, the real estate research firm Redfin analyzed more than 200 ZIP codes that have the largest numbers of educated Millennials and found that many of these locations are also among the most expensive places to live in the United States.²

These metro areas, including the Bay Area and Boston, often have limited land upon which to build single-family homes and permits are often difficult for

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developers to obtain. As would be expected, in 2014, much of the multi-family home construction in the United States was aggregated in the Northeast and California, where such dwellings outnumber single-family homes.

**Tight Credit and Conservative Underwriting Standards**

A third factor that has had a major influence on the home-purchasing behaviors of Millennials has been the tight credit market and the conservative underwriting standards that have been employed by lenders. Following the collapse of the mortgage-backed securities market in 2006, mortgage lenders significantly tightened their standards. For example, targeted FICO scores, a measure of credit worthiness, rose dramatically to around 750 for individuals interested in buying homes (Figure 8). This hurt first-time home buyers the most because few had strong or long-term credit histories. Most also lacked adequate savings or the home equity that was necessary to meet increasingly high down payment requirements.

**High Debt Levels**

The fourth and final roadblock young adults have faced when it comes to purchasing single-family homes has been the significant amounts of student loan debt many carry. During the recession, the cost of higher education continued to accelerate while many American families saw their capacity to pay for college erode. In addition, most college and university endowments generated poor investment performance during the period, which meant they had less money available to give to needy students in the form of scholarships and grants in aid. As a result, students who wanted to attend college increasingly turned to student loans to finance their educations. By 2014, about 43 million Americans held a combined $1.2 trillion in student debt. In current dollars, these borrowers had, on average, $26,700 of outstanding student loan debt. According to Zillow, that amount would have been more than enough to purchase every home listed for sale in the United States that year. Consequently, it comes as no surprise that a survey

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3 College Board, Trends in Student Aid 2015.
by the National Association of Realtors showed that 58 percent of prospective home buyers said their student loan debt obligations were their biggest impediments to saving for a down payment on a home.4

**Millennials Still Aspire to Own Single-Family Homes**

In light of the points summarized above, a strong case can be made that many Millennials have chosen to rent or to live in condominiums rather than to buy single-family homes because of economic pressures. However, a related question is whether their behaviors in this regard are also being influenced by other cultural or lifestyle choices. For instance, will many Millennials continue to eschew single-family home ownership even after they have paid off their student loans and acquired the necessary earning capacity to accumulate funds for down payments?

A number of surveys paint a fairly consistent picture of Millennials’ attitudes about their housing choices and their prospects for home ownership. These surveys suggest that Millennials attitudes and preferences are not much different from those of their parents, with many indicating that their goals include getting married, having families and owning their own single-family homes.

**Millennials Value Home Ownership**

Even today, a large majority of young renters say they aspire to own their own homes. The National Association of Realtors’ 2015 survey of home buyers indicated that more than 80 percent of Millennial respondents consider a home purchase a good financial investment.4 In addition, nearly two-thirds of Millennials who responded to a survey sponsored by Zillow indicated that they believe home ownership is an essential element of living the “American Dream” (Figure 9). Likewise, a survey by Trulia reported in November of 2014 that 78 percent of those between the ages of 18 and 34 answered “yes” to a question that

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*Figure 9.* Survey responses to views and desirability of home ownership across different demographic age groups taken from the U.S. Housing Confidence Survey, conducted by Zillow in July 2014.

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inquired as to whether home ownership was part of their idea of achieving the "American Dream." As the chart on the prior page demonstrates, these findings suggest that Millennials actually may have even more traditional views about home ownership than their immediately preceding generations – specifically the Baby Boomers and the Generation Xers.

**Millennials Plan to Purchase Homes in the Near Future**

It is one thing to aspire to home ownership and another to actually purchase a home. However, recently generated data suggests that many Millennials have concrete plans to acquire their first homes within the next few years. A poll conducted in May of 2015 by Harris on behalf of Trulia indicated that 89 percent of Millennials who were renting their living spaces had plans to buy primary residences in the future (Figure 10). This compared favorably with the data for Generation Xers (77 percent) and Baby Boomers (40 percent). However, it may take time before they are ready. Among those Millennials who said they had plans to purchase homes, 72 percent said that this would occur in 2018 or later.

Such results match up well with a separate, but similar, survey conducted for Freddie Mac in October of 2015. In that survey, a higher percentage of Millennial renters, 58 percent, said they plan to buy homes within three years. By comparison, 42 percent of Generation Xers and 33 percent of Baby Boomers said they were planning to make such purchases. Both the Trulia and Freddie Mac studies indicate that Millennials, even if they do not have the financial means to do so today, have hard goals to move away from renting their homes within the next few years.

**The Single-Family House Remains the Home of Choice**

While it is clear that Millennials favor home ownership and have goals to buy their first homes in the near future, the next question is: What types of homes are they likely to purchase? For instance, will they choose condominiums and remain focused on maintaining urban lifestyles – or will they buy detached single-family

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Figure 10. Reported portion of surveyed renters among Millennials, Generation Xers and Baby Boomers who said that they plan to buy a primary residence. Source: Trulia.

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homes in the suburbs? These choices will have a significant bearing on the types of homes that developers choose to build and therefore will have an impact on the volumes of lumber and building products the home construction sector will consume in the future.

Once again, studies indicate that Millennials' priorities are not much different from those of older generations. In the same Harris Poll for Trulia that was referenced earlier, only a minority of Millennials (10 percent) said they eventually plan to purchase high-rise apartments or lofts – and this preference is clearly reflected in the housing market data. According to the National Association of Realtors, among Millennials who purchased homes within the prior year, a mere 7 percent bought in buildings that had more than two units, such as condominiums and duplexes. The rest purchased single-family homes.6

Parallels to Baby Boomers in 1970s
Interestingly, the current housing market behavior of Millennials is neither unprecedented nor unique. The same scenario played out four decades ago. Baby Boomers born in the late 1940s and 1950s began entering the work force in the late 1960s and early 1970s. Before they had the means to purchase homes, they rented and their sheer numbers created significant demand for apartments. This trend was compounded by the effects of twin recessions that hit during that period, which kept many of the Baby Boomers in rentals longer than they had anticipated. To meet this demand for apartments, new home construction shifted away from single-family units to multi-family units (Figure 11). Between 1968 and 1973 the percentage of housing starts that were categorized as multi-family units averaged 44 percent. In 2014 and 2015 a similar analysis indicated that multi-family units as a percentage of total housing starts averaged 35 percent – up from the historic average of 28 percent since 1959. Again, this increase is likely a result of Millennials entering the housing market in force, but economic conditions have caused many to rent apartments rather than to purchase single-family homes.

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The parallel between the Millennials today and the Baby Boomers in the 1970s offers two learnings. First, when large numbers of people enter young adulthood, high demand for multi-family homes can be anticipated. A weak economic environment and a difficult job market, in particular, will compound this trend and result in increased demand for apartments. Second, such trends are normally temporary. Once economic conditions improve and young adults move on to the family formation stage of their lives, demand for single-family homes increases, which is exactly what occurred with the Baby Boomers in the late 1970s.

Improving Outlook for Millennials to Buy Homes

As we have outlined thus far, research indicates that Millennials' aspirations for homeownership are not much different from those of previous generations. What has largely held them back is prevailing economic conditions. Based on that premise, there are reasons to believe the outlook for the housing market is favorable. Three factors, in particular, are worth noting:

1. **Rising Employment and Income**: The U.S. job market has improved with more full-time jobs becoming available. In addition, wages are showing
signs of upward movement, particularly for job seekers under 40 years of age. Nonfarm payroll employment in the U.S. also gained by 3.12 million in 2014, the fastest pace since 1999. Through October of 2015, annual employment in the U.S. was on course to reach 2.47 million.

2. **Improving Credit Availability**: Mortgage financing is becoming more accessible and lending standards are becoming more relaxed and less onerous. Recent surveys of senior loan officers by the U.S. Federal Reserve indicate that credit standards for home mortgage applicants are easing and FICO scores for approved loans have continued to fall since 2012.

3. **Housing Affordability**: Measures for housing affordability for many parts of the United States remain above historic norms. In addition, rising rents over the last several years have meant that mortgage costs for single-family homes have become more competitive – which is encouraging more people to buy rather than to rent their homes.

The process will be slow, because, as was mentioned earlier, the best job opportunities for Millennials have developed in high-cost urban centers, such as San Francisco, San Diego, Boston, New York, Seattle and Austin. This means it will take longer for many Millennials to build the financial resources necessary to purchase homes. On a positive note, however, these same high-growth regions have seen local rents rise much faster than home prices. Given their preference for home ownership, Millennials living in these expensive cities eventually may choose to move to the suburbs or seek job opportunities in areas like Atlanta, Charlotte and Denver that offer comparatively lower costs of living.

With respect to the degree to which student loan debt is another impediment to home ownership among Millennials, it is important to note that while 40 million Americans owe an average of about $30,000 in student debt, their challenges are not insurmountable. Given improving conditions in the job market, and the higher wages that are accruing to those with higher levels of education and specialized training, over the next decade many young adults should be well positioned to pay down their student loans, which will enable them to carry home mortgages.

**Translating Housing Market Shifts to the Timber Market**

Based on what we understand about Millennials and the unique challenges their generation faces relative to participating in the housing market, their capacity to influence demand for single-family homes will take time to develop. However, many economists expect rates of new home construction to return to the 50-year historic levels of 1.4 million starts a year by 2018. Among the housing starts categories, the rate at which single-family homes are constructed is projected to
increase faster than the rate for multi-unit homes, including apartments and condominiums (Figure 12 and Table 1). By the end of the decade, close to 70 percent of all housing starts will be single-family units, which will be close to the long-term, historic average.

Thanks, in large part, to Millennials, the growing demand for single-family homes will translate into rising demand for lumber and structural wood panels. According to a forecast by Forest Economic Advisors, lumber consumption in the U.S. is projected to grow at an average annual rate of 5.7 percent through 2020. In addition to more homes being built, there are two other complimentary trends that will support rising demand for lumber. One of them is increased spending on home repairs and remodeling projects. As home values increase and household incomes rise, RISI projects lumber usage for home improvements will grow at a 5.3 percent annual rate through 2017.

Other emerging trends of interest will be (a) the degree to which developers continue to increase their use of wood-based building materials, including engineered wood products, in the construction of apartments and condominiums (see photo & Figure 13) and, (b) the degree to which younger home owners express increased interest in environmentally friendly construction. With these factors in mind, the U.S. harvest of softwood sawtimber will need to increase at a 3.7 percent annual rate for domestic sawmills to supply the necessary building materials.

In light of this projection, the issue of most interest to timberland investors is how this increased demand will affect timber prices. Expectations vary, but there is a common view that price gains will be steady over the next decade. During the next 10 years (through 2025), RISI forecasts average annual price increases of 5.7 percent for southern pine sawtimber and 1.7 percent for Douglas fir sawtimber grown in the Pacific Northwest.
Conclusions

The forecasts may differ, but based on the underlying demographic and economic fundamentals, TIR believes the current tepid demand for single-family homes is not a reflection of an enduring lifestyle shift by Millennials, who have shown a preference for urban living in apartments and condominiums. There are five reasons for this assessment:

1. Millennials, the generation born between 1980 and 1999, are the lynchpin of the housing market. They will exceed Baby Boomers in numbers in future years and are expected to buy single-family homes in ever increasing numbers. This will perpetuate the "ladder" effect, enabling older homeowners to move up to other segments of the housing market.

2. In recent years, Millennials have focused on rental housing (largely in apartments and lofts) and have eschewed purchases of single-family homes due to the unique economic factors of the times. These factors have included (a) a weak employment market for new job seekers; (b) poor wage growth; (c) expensive and limited housing in regions where job growth for young adults are concentrated; (d) strict lending standards by mortgage lenders for people with weak or limited credit histories; and (e) finally, the high levels of student debt carried by many recent college graduates.

Figure 13. Average use of softwood lumber and engineered wood per unit of new multi-family residential construction in the U.S. for 2003 and 2012. Source: Engineered Wood Association.
3. Despite these economic factors, studies and surveys continue to confirm that Millennials have traditional housing goals that are similar to those of their parents. A majority eventually want to move out of rental units and live in a single-family home.

4. As Millennials enter the housing market and buy their first homes over the next several years, rates of single-family home construction eventually should rebound to historic levels, as they did in the late 60s and early 70s when many Baby Boomers first entered the housing market.

5. With the recovery of the single-family home construction market, lumber demand will grow, creating additional support for timber markets. This demand will be met particularly in wood producing regions of the country, like the U.S. South, where excess sawmilling capacity exists.

In closing, timberland investors should be encouraged that a window of opportunity is likely to develop for improving timber prices because a solid argument can be made that U.S. residential home construction will grow steadily through the end of this decade. Furthermore, an increasing portion of that growth is likely to occur in the single-family home segment of the market, which generates the highest rates of lumber usage. These factors will strengthen underlying investment fundamentals for timberland investors by generating increased levels of income and asset appreciation for the long term.
For questions and additional information, contact:

Chung-Hong Fu  
Managing Director of Economic Research and Analysis  
Timberland Investment Resources, LLC  
1330 Beacon St., Suite 311  
Brookline, MA 02446  
Phone: (617) 264-4767  
E-mail: fu@tirllc.com

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