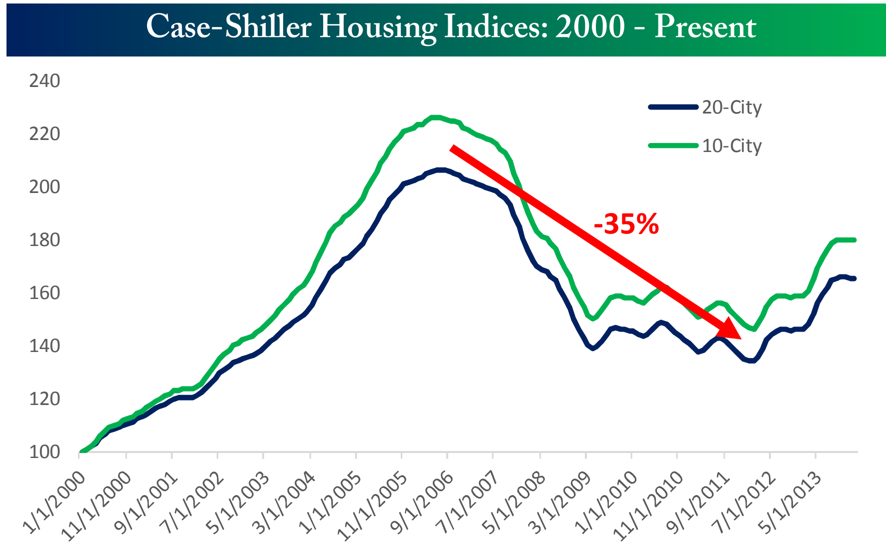
BESPOKE Investment Group

# B.I.G. Tips

April 23, 2014

## Long Term Housing Outlook

In the boom years of 2002 to 2007, capital flooded into the US housing sector, unleashed by a tidal wave of new credit, thanks to torrid demand for subprime-backed securitizations and a positive feedback loop of new mortgage instruments both in the consumer market and for investors. Prices were also a factor, as speculators joined primary home purchasers to buy more and more inventory to flip in the future or re-leverage, adding demand that boosted prices even further. The result was the familiar boom-and-bust narrative that still remains a fixture of coverage more than seven years after the bubble popped and dragged down the American economy as a whole. According to *Gallup*, 30% of Americans still view real estate as the best investment. This beats out gold (24%), stocks (24%), savings accounts/certificates of deposit (14%), and bonds (6%). Below is a chart showing the rise and fall of housing in terms of prices as measured by the *Case-Shiller* indices of home prices in major metropolitan areas across the country. The indices show the meteoric rise of home prices beginning in the early 2000's to their collapse and continued weakness at the beginning of this decade.




In the following pages, we will make a bullish case for residential housing, and why it matters so much for the American economy. The housing market is not without risks. We will highlight some key impediments we see for housing prices, demand, and turnover, and also illustrate some long-term plays that may benefit from a more dynamic housing sector in the United States.

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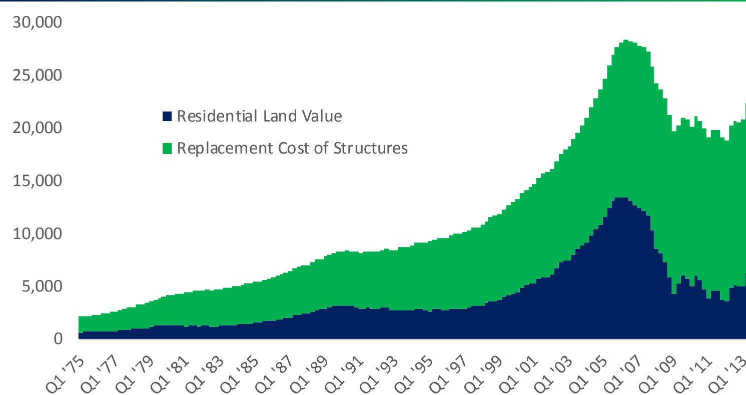
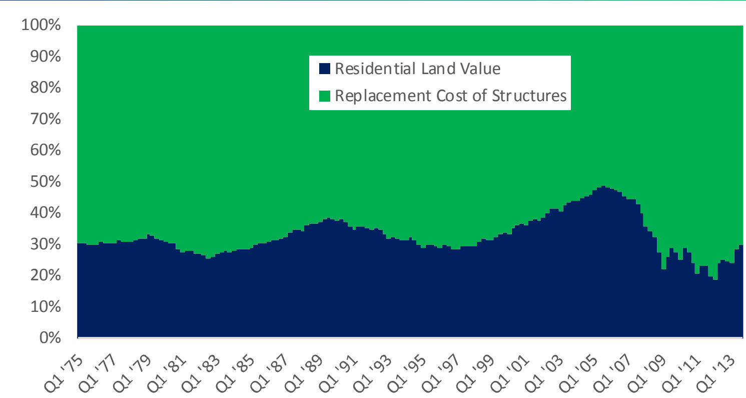
Before we begin, it's worth spending some time to decompose what housing is. In addition to the physical house itself, purchasing a home includes the purchase of land. Land has a more fixed supply than structures, but structures generally account for far more of the value tied up in real estate than the land itself. Using data from the *Lincoln Institute for Land Policy*, the chart below shows the aggregate value of the land and structures involved in US single-family housing, and also each component's share of the total value.

Since its peak at almost 50% of the value of real estate in 2005, land has steadily lost value relative to structures. That trend does appear to be reversing, which would be good news for housing prices. Higher land prices are supportive of increased activity for repair and remodel spending (which we will discuss further later in this report). As land values rise, they can support increased investment in structures. Structures are the real key to unlocking economic growth via housing through construction. As we discuss on the following page, construction is one of the factors that allows housing to punch above its weight in terms of economic growth.



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The most important fact about housing: it's *special*. Why? Housing has an outsized contribution to economic activity for a variety of reasons.

- *Capital formation*. For most households, housing is a key source of savings via amortization of mortgages and price appreciation. Housing is simultaneously an expense and an investment, which is rare for households since most other non-financial consumer assets depreciate over time. While there is some debate over how good of an investment housing is relative to other asset classes, its unique attribute of combined consumption and investment make it an attractive option for the vast majority of Americans.
- *Interest rates*. Did we mention mortgages? Mortgage finance is a huge component of interest rate changes and flows between various sectors of the financial markets, because housing purchases are by far the largest single-line item most Americans will ever spend money on; financing these purchases creates huge flows of interest rate product. As of Q4 '13, there was $8.7 trillion in outstanding mortgage-related debt securities, second only to Treasuries and corporate bonds in the fixed income universe. Another $1.1 trillion of mortgage debt is held by banks and other firms outside of securitizations.
- *Employment*. Employment and housing have a mutually dependent relationship. A strong labor market and steady incomes boost demand for housing in terms of volume and prices, while a strong housing market increases labor mobility (by allowing for easier sales of homes when a new job is in another city) and new construction. Construction is a fertile field for job seekers with less human capital and therefore greater risk to economic dislocations. Among construction-related professions, the typical education level is a high school diploma or less; fewer than 30% of most construction occupations' labor force have some college, versus over 60% for the labor market as a whole. A strong housing market reinforces a strong labor market and vice versa.



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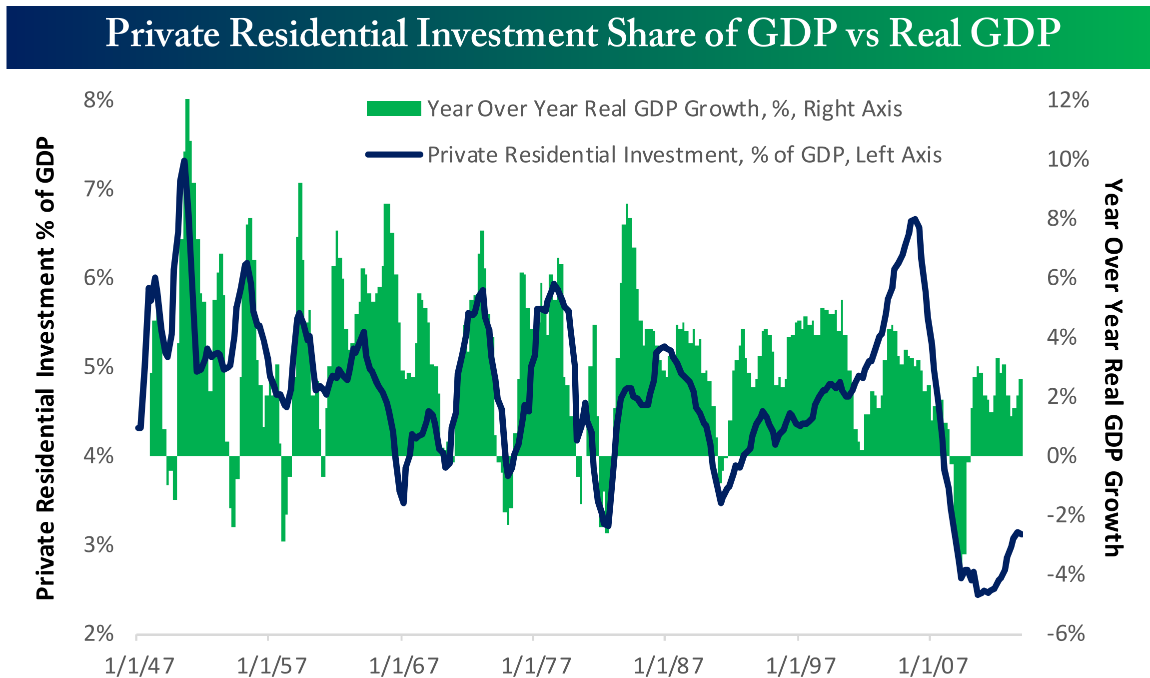
The chart below illustrates the special relationship between construction and economic growth. There are some caveats to the recent trend, which will be discussed shortly, but the correlation between private residential investment's share of GDP (a measure of spending on new homes and improvements to existing homes) with real GDP growth is very strong. When housing investment accelerates, the economy grows faster.




For the forty years following WWII, strong dynamics for housing led to higher real GDP growth; when housing fell into a downturn, so did the rest of the economy. But starting in the period following the brief recession in 1990/1991, housing's strong relationship to GDP started to break down. Throughout the boom years of the 1990s, housing's share of GDP was far lower than could be expected based on prior cycles of expansion. Following the tech bubble, a small recession gave way to continued economic growth, but this time over-investment fueled a massive expansion in economic activity related to residential housing. Private residential investment hit its highest share of GDP since the 1940s, and "catching up" following the low investment of the 1990s became an overshoot. The result was a crash to the all time low in housing investment that we see today, despite a return to economic growth. In our view, housing investment is due for another catch up; a return to the previous trend whereby periods of economic growth were led by an expansion in housing activity or at the very least a significant bounce from currently depressed levels.



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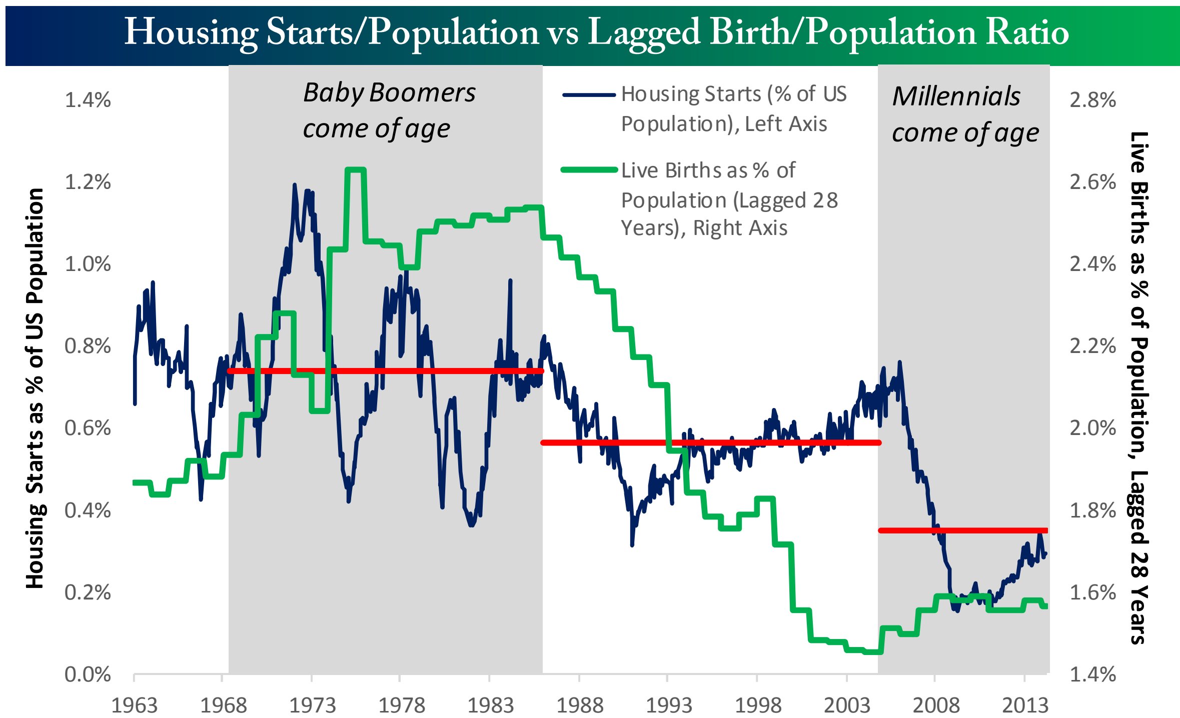


This view is reinforced by demographics. By combining *US Census* data with housing starts data, we produced the following chart. On the left axis we show the seasonally adjusted annual rate of housing starts divided by the population. Red lines represent the average level during each highlighted period. On the right axis we show the ratio of live births to population, lagged by 28 years. In other words, the green line is showing births divided by population for the year 28 years before the date on the x-axis. The increase in the lagged birth/population ratio beginning in the late 1960s is the rise of the Baby Boomers, while its inexorable decline starting in the 1980s shows the rolling off of the baby boom. The small increase in the ratio beginning in 2005 shows the beginning of the Millennials. The lag of 28 years is designed to show the advent of each cohort into a period of household formation: marriage, purchase of a home, and starting of families. Referencing *US Census* data, the largest increase in home ownership comes between the ages of 24 and 35. As of 2010, 22.8% of Americans aged 24 or younger owned homes. For the cohort aged 35 to 39, 61.9% are homeowners. 28 is a proxy used to capture the transition from renting to owning.



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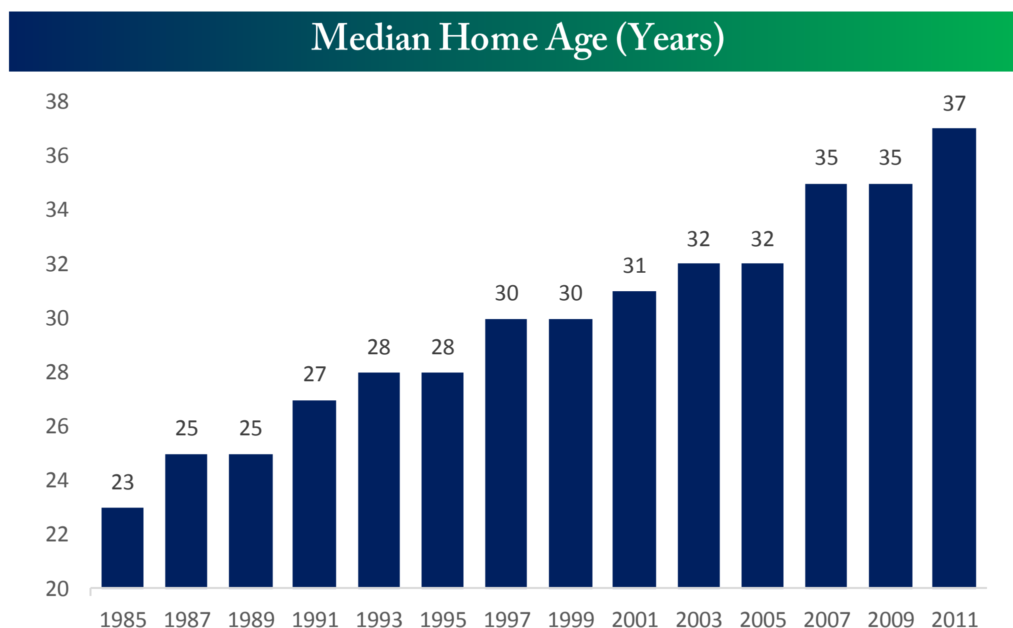
We would argue that the dismal level of housing starts since the Millennials began entering the housing market cannot continue. Demographic effects will push that ratio back upwards over the coming years, most likely to a level around the average for the inter-cohort period of 1986 to 2004. With an expected US population of over 333 million in 2020, catching up to historical norms in terms of housing starts per capita would see the nominal number north of 1.8 million per year, compared with a relatively paltry 926,000 in the most recent reading. We don't expect them to, but if housing starts per capita were to hypothetically return to levels seen during the Baby Boomer's period of peak demand for housing, annual starts would achieve a level of more that 2.5 million per year.

Compounding this demand is a rapidly aging US housing stock. While improved building codes, new materials, and more advanced construction techniques have naturally lengthened the durability and sustainable age for American homes, eventually all wood rots, siding falls off, shingles decay, and floors wear. Below is a chart showing the creeping upward pace of median age for US homes dating back to the 1980s. It bears mentioning that the distribution of homes is weighted to the older side of the median: 61% of US single family residences were at least 31 years old according to the *Department of Housing and Urban Development's* biannual *American Housing Survey* in 2011 (the most recent date for which data was available). Since the *1985 American Housing Survey*, the median home has jumped from 21 to 37 years old.



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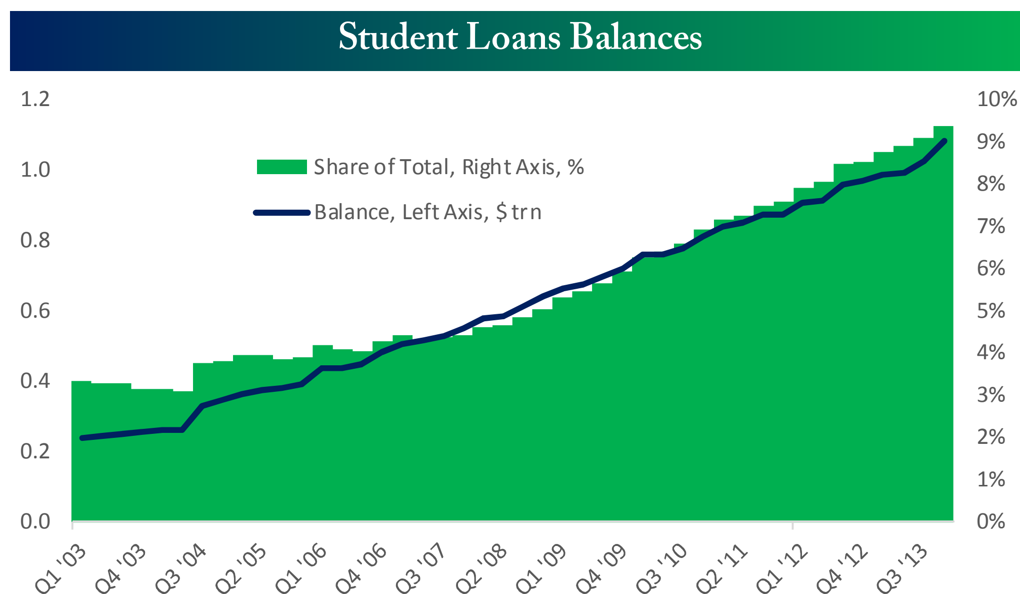
While we are bullish for housing, we are also realistic. Millennials have a drastically higher standard of living, greater access to information via the internet and other technologies, and a generally more secure life than their parents did, but they do face unique challenges. From a financial perspective, the biggest challenge is without a doubt student loans.

Using data from the *Federal Reserve Bank of New York*, the chart below shows the balance and share of total consumer debt that student loans currently comprise.




Balances and share of debt have been growing in unison since before the financial crisis. Keep in mind, this debt is being accrued overwhelmingly by young people, so its share of young folks' debt is going to be much higher than total balances for all consumers illustrated above. In effect, student loans are a tax on Millennial incomes. While investing in education is a very smart decision economically that brings with it an earnings premium for college grads, using debt to finance schooling (with a ten to thirty year amortization) reduces future income net of debt service and savings potential relative to previous education finance schemes. The appetite for housing will be incrementally constrained by lower abilities to come up with down payments and lower income net of debt service for young home buyers, especially in light of the reforms in mortgage lending standards brought forward by the *Wall Street Reform and Consumer Protection Act* (commonly referred to as Dodd-Frank). The qualified mortgage standards set out in rule makings following the passage of Dodd-Frank effectively constrain mortgage lending relative to previous standards, incrementally reducing access to mortgages.



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In addition to headwinds from Dodd-Frank, the housing market faces other hurdles: resolution of the government sponsored entities (GSEs) is a major issue. We won't delve deeply into that particular topic other than to say that the uncertainty around how Fannie and Freddie will be resolved is extreme and deeply influenced by Washington politics: a tough game to call at the best of times, an impossible crapshoot at its worst.

The *Affordable Care Act* (the ACA, also known as Obamacare) represents another headwind for the housing market, although a nuanced one. The ACA introduced a new tax of 3.8% on capital gains for "Net Investment Income" (NII), applied to households earning more than $250,000 in modified adjusted gross income. NII captures a wide swath of income including capital gains on financial assets, dividends, gains from the sale of partnerships and gains from the sale of investment real estate (*excluding* the primary residence). The 3.8% tax doesn't apply to the vast majority of Americans. Median income in 2012 was $51,017 and only 23.8% of 1 - 4 unit housing structures are rented, therefore requiring an investor to own them. But the tax will suppress turnover and liquidity in the housing market at the margin as investors in single family homes have to weigh it against their total tax situation; some may delay sales until absolutely necessary to put off paying the tax.

So how to play the changes we expect to hit the housing market? We see three possible approaches on the following pages.



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*Theme 1:* **Millennials Buying Homes**

*Possible plays*: D.R. Horton (DHI), Lennar (LEN), Trulia (TRL), Zillow (Z)

If Millennial demand accelerates, we would expect it to be concentrated in the lower end of the housing market. First time buyers are more likely to buy either smaller existing inventory closer to cities or new construction that represents a strong value proposition. To play the latter, investments in home builders with portfolios of land that can be affordably developed represent the most beneficial upside to the trend of Millennials entering the housing market en masse. We would also expect internet real estate names to benefit from this shift also given higher penetration of technology among younger Americans.

D. R. Horton offers an attractive range of price points and a diversified portfolio of developments to play the ascent of Millennials in the housing market from a homebuilder perspective. Lennar has a strong social media presence and is increasingly orienting its homes to younger, technology-savvy buyers. Meanwhile, internet real estate plays Trulia and Zillow are both positioned to capture increased traffic from connected young people shopping for their first home.

*Theme 2:* **Aging Inventory**

*Possible plays*: Home Depot (HD), Lowe's (LOW), Lumber Liquidators (LL), Builders FirstSource (BLDR), PGT Inc (PGTI), Masco (MAS), Homebuilder+ ETF (XHB)

As the American home's age increases and housing prices rebound, homeowners may choose to reinvest in existing homes instead of trading up market. A constrained labor market and lower economic growth than the past would contribute to the success of this theme. Repair and remodel spending would still have positive implications for growth, but this theme represents a more constrained vision of how Americans invest in their homes. Home improvement retailers Home Depot and Lowe's would benefit from do-it-yourselfers investing in their homes, while Builders FirstSource and Lumber Liquidators are ways to get exposure to more activity among contractors doing remodels and upgrades to existing homes. Finally, PGT and Masco are both companies with product portfolios that are leveraged to increased investment in existing housing stock.



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*Theme 3:* **Housing Boom**

*Possible plays:* Toll Brothers (TOL), Bank of America (BAC), ReMax (RMAX), Wells Fargo (WFC)

If the US economy returns to its pre-crisis economic growth trend, Millennials aggressively buy up housing inventory, and labor markets tighten significantly, housing could be poised for a massive decade. Investments in names that benefit from high turnover in the real estate market and large home price appreciation will outperform.

Toll Brothers focuses on the luxury section of the housing market, and its higher dollar price offerings will be better oriented to a drastic increase in US home prices than other builders. ReMax is a pure play on turnover in the housing market, as its realtors clip commissions with each sale; higher selling volume of single family homes flows straight to the brokerage's bottom line. Finally, both Bank of America and Wells Fargo have relationships with huge swaths of American consumers and mortgage origination capacity to address a surge in demand for housing finance in the event housing activity really picks up.

While a boom in housing isn't our most likely scenario, it is certainly possible. Almost regardless of price trends in housing (which have been more positive recently anyways), the current crop of Americans coming of age on college campuses and in urban centers will gradually start investing in housing. While the shift will not be as enormous as the flight out of urban centers to the suburbs that was the hallmark of post-war America, incremental demand from younger Americans is coming. If anything, the bust that both housing and labor markets have been gradually recovering from over the last 7 years has created pent up demand and the need for a "catch up" in household formation. We expect the shift in housing's fortunes to build gradually over the next two to five years, so a trade on one of our themes is not a short-term one, but a play on a trend that will be driven by demographics, the secondary effects of The Great Recession and an aging housing inventory.



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