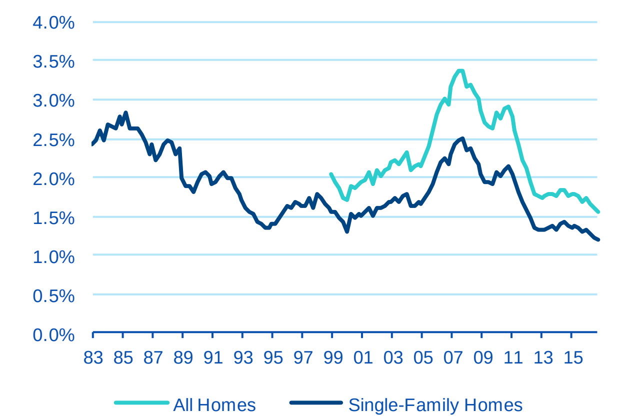
6. Regional Housing Trends

An important element of the recovery at the regional level has been the housing market. As such, the outcome of the housing sector will have implications not only for home prices in 2017 and beyond, but also for overall economic conditions at the state-level. The national median existing home sales price in 2016 increased 5.5% to $232K from $220K in 2015. Home price appreciation was particularly strong in the second half of the year, which together with the somewhat higher mortgage interest rates resulted in a decline in housing affordability. Home prices were driven by a lack of homes for sale in the existing homes market (Figure 1), which was a result of many homeowners having locked in low interest rates through purchases or refinancing since the financial crisis and not wanting to get out these beneficial contracts by selling, as well as by insufficient new construction. Housing starts have been low for such an extended period of time. The ratio of housing units to adult population in 2016 reached its lowest level since 1980 (Figure 2). The causes for the low rate of new construction are still not well documented, but lower availability of skilled construction labor and subcontractors, high regulatory burdens and higher land prices are among the possible culprits.

Figure 6.1 Existing Homes for Sale (Seasonally Adjusted) to Housing Stock, Ratio (%)



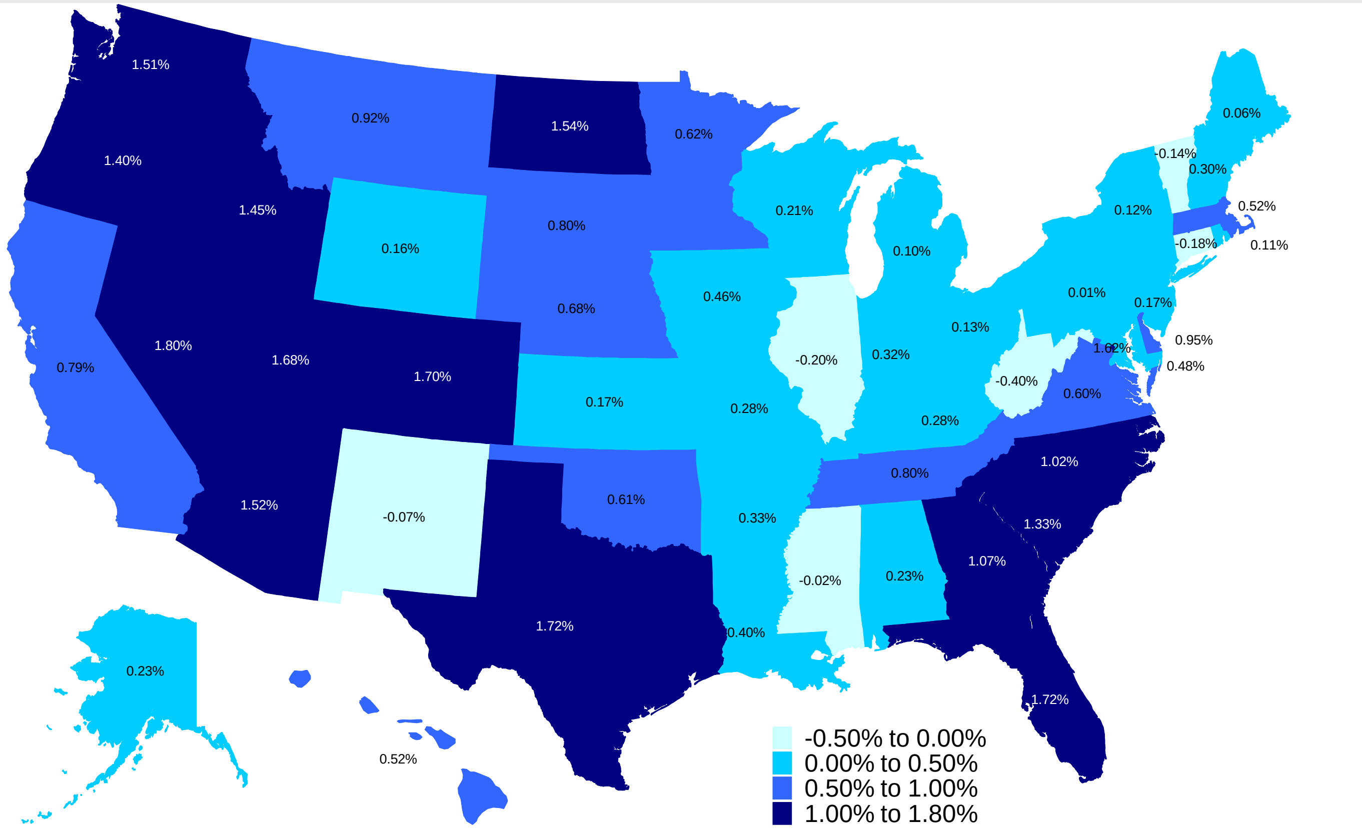
Source: BBVA Research, NAR and Census Bureau

Figure 6.2 Housing Units to Adult Population, Ratio

Source: BBVA Research and Census Bureau

In the long-run, housing demand is determined by population growth, which varied significantly from state to state between 2014 and 2016 (Figure 3). During this period, several states such as West Virginia, Illinois, Vermont, New Mexico and Missouri lost population, while multiple states, predominantly in the South and West regions, posted solid gains.

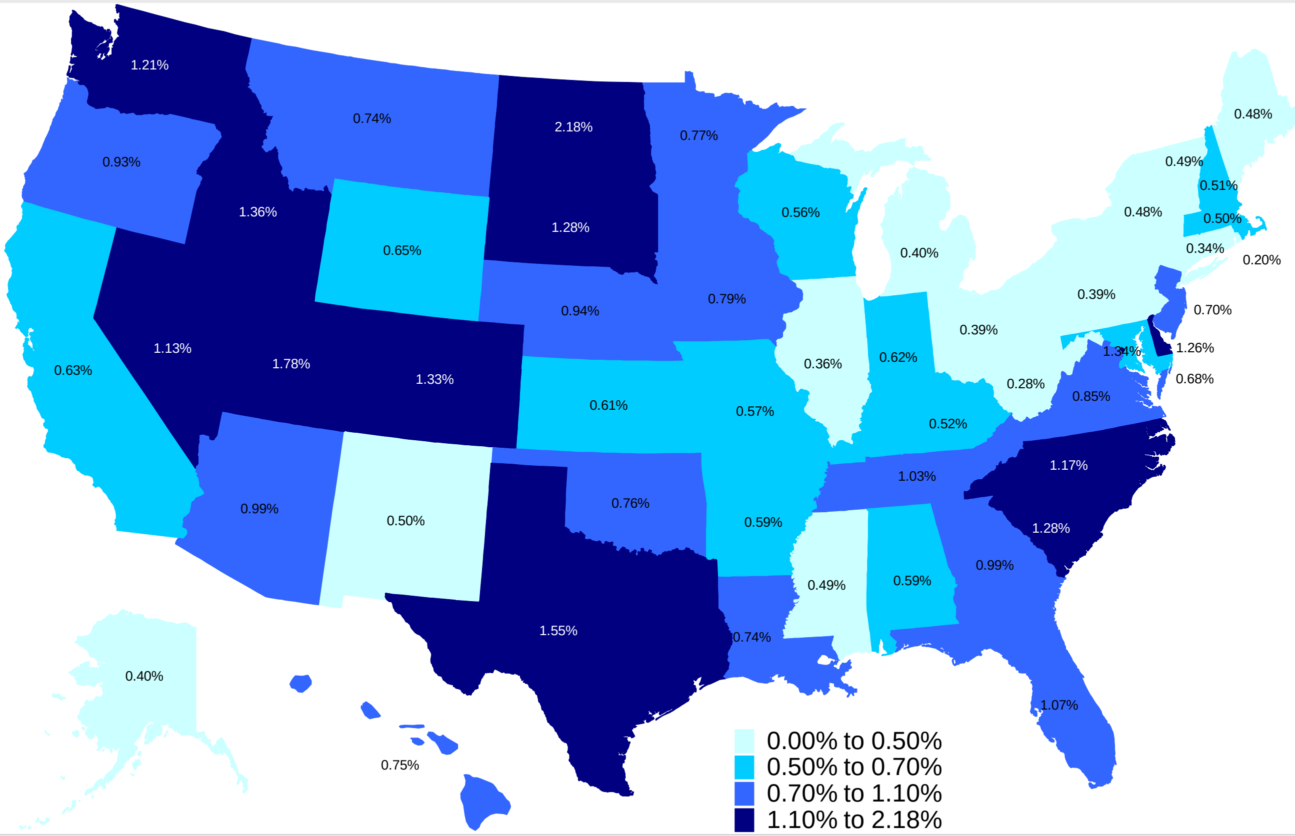
Figure 6.3 Demand: Average Annual Population Growth by State, 2014-2016 (%)



Source: BBVA Research and Census Bureau

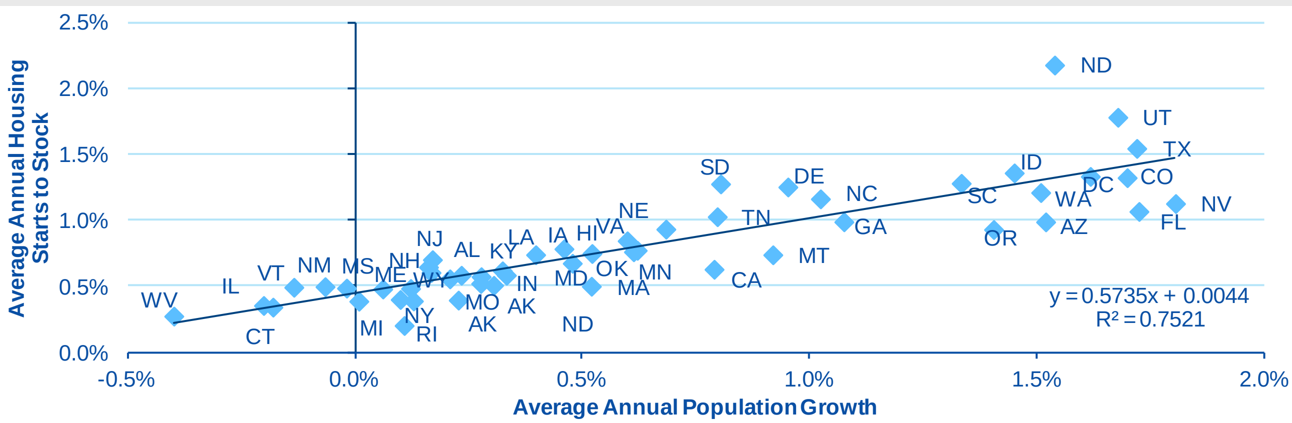
Construction by state did respond proportionately to the strength of the local demand (Figure 4 and Figure 5). This indicates that the factors causing the low housing stock to population ratio nationwide are likely present everywhere. North Dakota, South Dakota and Utah are among the states where housing starts were higher than what would have been expected based on population growth, while Nevada, Florida, Arizona, California, Oregon and Washington were among the ones where it was lower. Not surprisingly, the second group of states is the one where price appreciation in 2016 was the strongest (Figure 6).

Figure 6.4 Supply: Average Annual Housing Starts to Housing Stock by State, 2014-2016 (%)



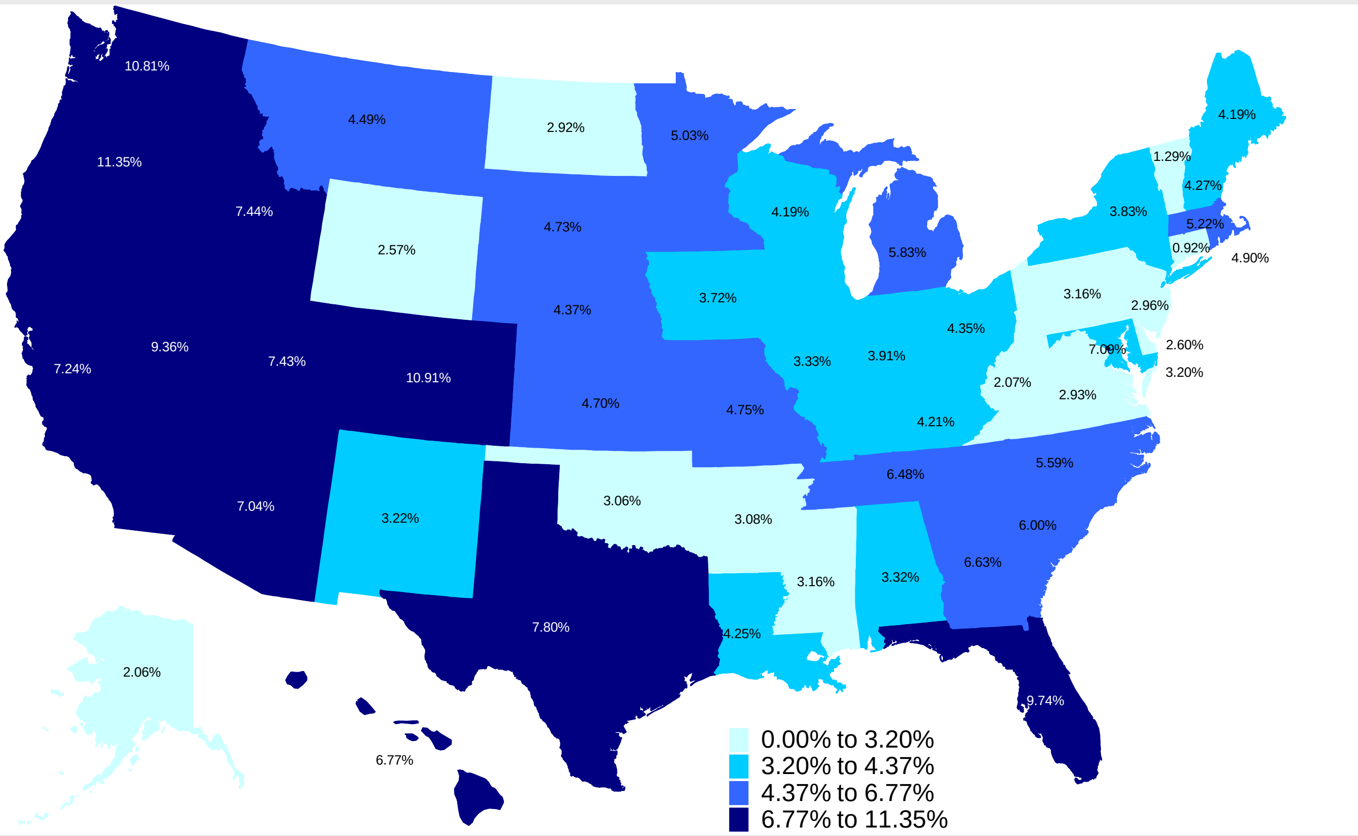
Source: BBVA Research and Census Bureau

Figure 6.5 Demand vs. Supply, 2014-2016 (%)



Source: BBVA Research and Census Bureau

Figure 6.6 FHFA Home Price Index 2016 (year-over-year %)



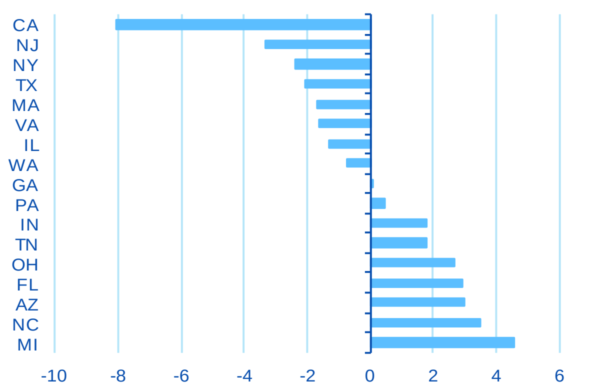
Source: BBVA Research and FHFA

Looking at the housing to population ratio, the shortage is clearly the strongest in California (Figure 7). The effect of suboptimal new construction in the 2014-2016 period in this state was not only higher prices, but also further aggravation of the structural housing problems, illustrated by the ratio of housing units to adult population, which has gone from 1.3 percentage points below the U.S. average in 1980, to 7.5 percentage points below it in 2010, and over 8 percentage points lower in 2013. The causes for the divergence between California and the U.S. average can be explained by California's more cumbersome regulations[10] compared to other states and geographic limitations[11] in coastal areas, which lead to higher prices and spill over into inland areas.[12] Population growth remains solid due to the state's economic attractiveness, especially for highly educated Millennials. With this in mind, if something doesn't change (regulation being the most likely

10: Kok, N. et al. (2014). Land Use Regulations and the Value of Land and Housing: An Intra-Metropolitan Analysis. Journal of Urban Economics http://doi.org/10.1016/j.jue.2014.03.004
11: Saiz, A. (2010). The Geographic Determinants of Housing Supply. The Quarterly Journal of Economics. https://mitcre.mit.edu/wp-content/uploads/2014/03/The-Quarterly-Journal-of-Economics-2010-Saiz-1253-96.pdf
12: Taylor, M. (2015). California's High Housing Costs. Legislative Analyst's Office (State of California). http://www.lao.ca.gov/reports/2015/finance/housing-costs/housing-costs.pdf

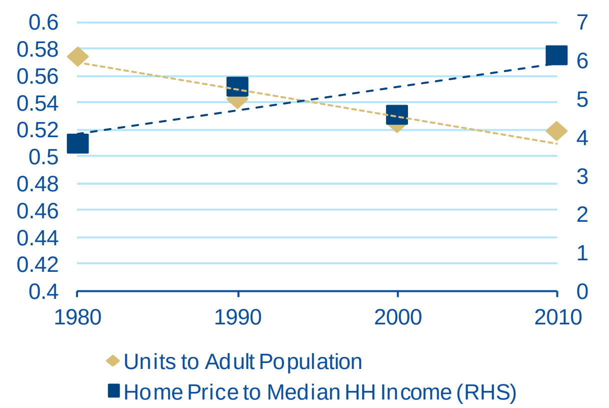
area where changes can be made), the housing to population ratio is likely going to continue declining further in the foreseeable future, making affordable housing ever scarcer (Figure 8) and eventually negatively affecting the long-term competitiveness of the state. Furthermore, constricted housing supply also exposes the state to higher risk of housing price bubbles, as markets with inelastic supply have been found to exhibit greater price volatility.[13]

Figure 6.7 Housing Units to Adult Population in Large States in 2013, Difference from U.S. Average (Percentage Points)



Source: BBVA Research, NAR and Census Bureau

Figure 6.8 Housing Units to Adult Population and Median Home Price to Median Household Income in California (Ratios)



Source: BBVA Research and Census Bureau

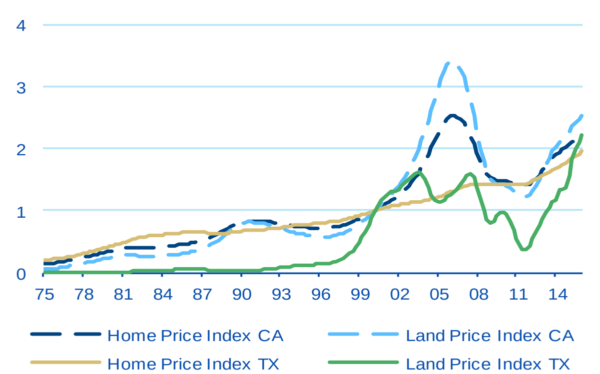
Looking at the housing to population ratios, what's interesting is that the ratio for Texas has also fallen below the national average. The ratio has gone from 2.5 percentage points above the national average in 1990, to a full 2.0 percentage points below it in 2013. If this situation continues, Texas' reputation for affordable housing will be at risk. The situation in Texas is likely related to higher residential land prices (Figure 9), which are a result of the high demand from the sustained strong population growth and possibly some metropolitan areas having reached a point where urban sprawl starts to incur high marginal costs such as long commute times. In the end, Texas is likely to experience sustained home price appreciation, at least over the mid-term, as long as population growth remains positive.

While the ratio of housing units to adult population in California and Texas has declined over the recent decades, the one for Florida has remained relatively stable since 1980, despite the construction boom experienced before the subprime crisis. By now, the excess housing inventory has been absorbed by the post-crisis population growth. The main challenge going forward will be the decrease in affordability, as indicated by the difference in the ratio of median home price and income per capita in 2013 and 2016 (Figure 10). Affordability is expected to continue to decline in 2017 as home price appreciation is expected to remain strong, amid higher mortgage interest rates.

13: Wheaton, W. et al. (2014). Error Correction Models of MSA Housing 'Supply' Elasticities: Implications for Price Recovery. MIT Department of Economics Working Paper No. 14-05. http://dx.doi.org/10.2139/ssrn.2382920

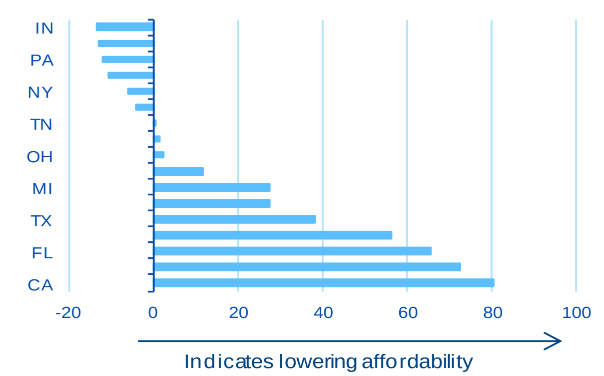
While California, Texas and Florida are experiencing strong population growth and price appreciation, a large group of states, primarily in the Northeast and Midwest are experiencing the opposite. Low population growth over the last three years, or even negative one in West Virginia, Illinois, Connecticut and Vermont, has resulted in low home price growth. As a result, the composite housing affordability index for the Northeast has increased in 2016 to an almost record level (Figure 11), and was 42% higher than the average for the region over the 1989-2004 period. In regards to the Midwest, while affordability has declined significantly since 2012, it still remains considerably higher than in the other regions. The reason affordability has not increased in 2015 and 2016 like in the Northeast is the stronger home price growth despite strong income growth (Figure 12). The solid housing affordability in both regions can be an asset over the long run, but only if the states in these regions find a way to improve their overall economic attractiveness and support population growth, especially by retaining and attracting educated Millennials.

Figure 6.9 Housing Price and Residential Land Price Indices, California and Texas (2Q00=1)



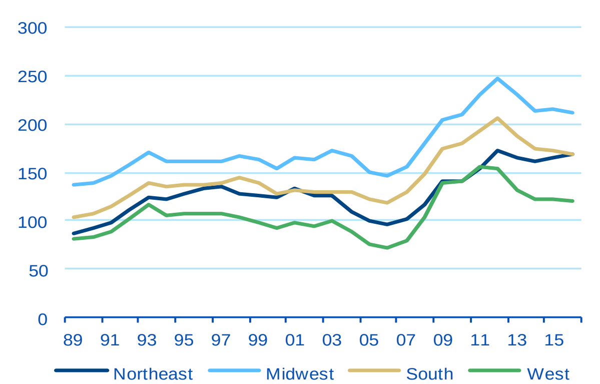
Source: BBVA Research and Lincoln Institute for Land Policy

Figure 6.10 Median Home Price to Income Per Capita Ratio, 2013-2016 Difference (Percentage Points)



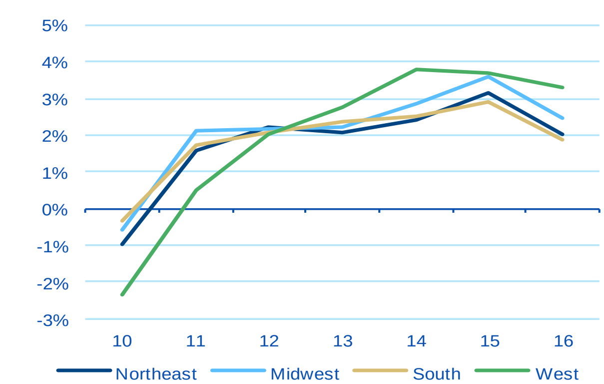
Source: BBVA Research calculations based on data from Zillow and BEA

Figure 6.11 Housing Affordability Index, (Index=100) when Median Family Income Qualifies for 80% Mortgage on a Median Priced Home



Source: BBVA Research and NAR

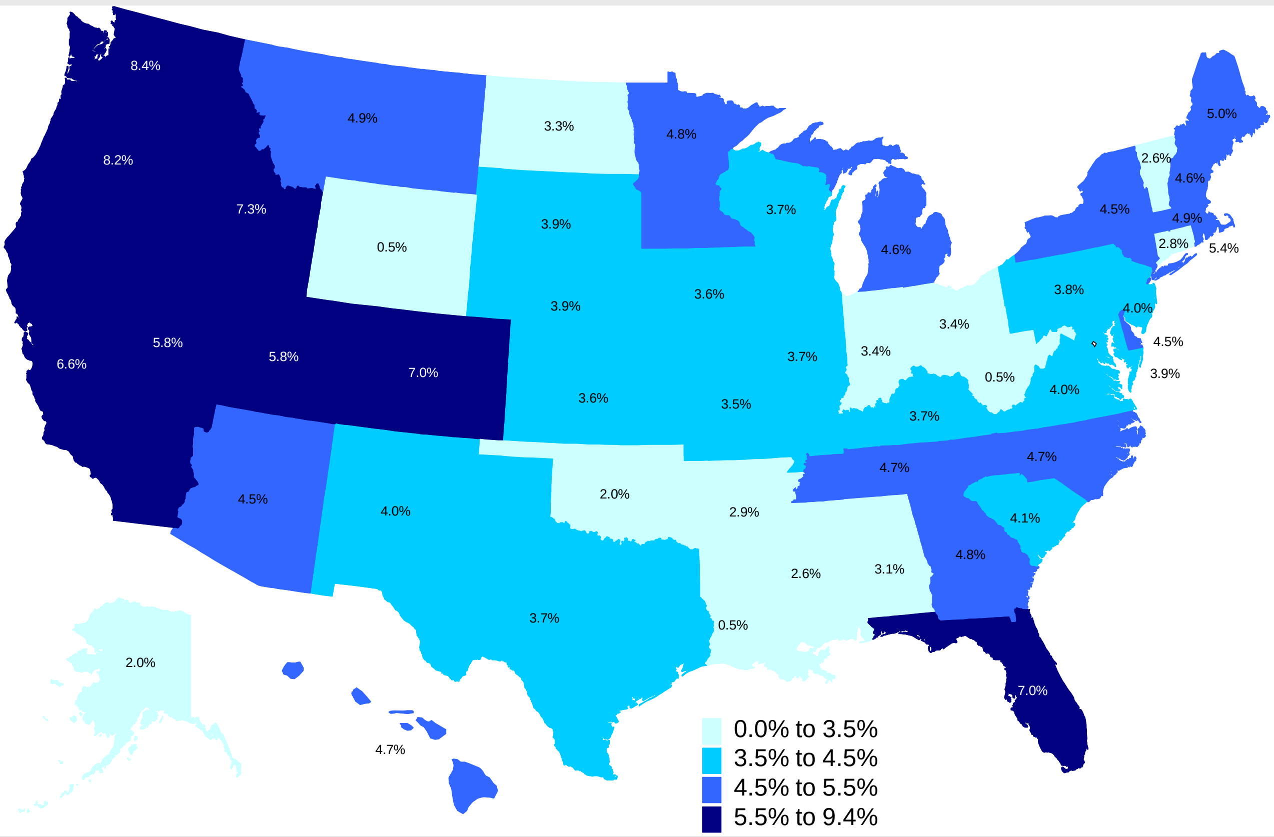
Figure 6.12 Median Family Income (year-over-year %)



Source: BBVA Research and NAR

In light of our baseline macroeconomic forecast, which implies moderate economic growth in the short-to mid-term, the tightness of the existing homes market, as well as the suboptimal supply of new housing units at the national level and in many large states, we expect solid home price appreciation to continue going forward. Home price growth will be strong in the West region, and will also remain strong in Florida, while it is expected to decelerate in Oil and Gas exposed states. In most parts of the Northeast and Midwest, home price appreciation should remain low to moderate. The strong pace of home price appreciation in the Southeast ex-Florida region should slow down to some degree, on the account of an anticipated slight slowdown in economic expansion in this part of the U.S.

Figure 6.13 FHFA Home Price Index 2017 Forecast (%, year-over-year)



Source: BBVA Research

Interest rates, an important factor for the housing market, are expected to remain low compared to historical figures. Under our baseline scenario, we see the 30 year fixed mortgage interest rate gradually increasing from an average of 4.3% in 2017 to 4.8% in 2020. The extended period of relatively low interest rates will support the sustained recovery of the housing market, which now relies on increased supply of new units, particularly entry-level single-family homes for Millennials that start forming families. Past 2017, home price growth should slow down, but very gradually. An upside scenario, where incomes increase at a fast rate would imply an extended period of strong home price growth, despite higher interest rates and stronger impetus for new housing construction. A downside scenario, where economic headwinds push the country into recession, would imply home prices decelerating sharply or declining, depending on the severity of the downturn, with more than likely declines in prices in markets where they have decoupled significantly from fundamentals, primarily personal income. In any case, our analysis indicates that any misalignments in markets where they might exist are significantly lower than in the 2000s, and the dangers of an economic crisis emanating from or being reinforced by a downturn in the housing market are low this time around.

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