

Housing Outlook

- Housing market activity slowed in 2H18 in response to higher mortgage rates. Existing and new home sales declined, while new construction and home prices slowed down
- Despite affordability remaining an issue going forward, demographic trends will continue to support housing demand
- Home price appreciation will continue to decline, but will remain above inflation in the short to mid-term due to a suboptimal supply of new and existing homes for sale
- Tighter financial conditions will balance out some of the regional disparities built up over the last decade
- The attractiveness of large coastal knowledge-intensive metro areas will remain, but the lack of affordable housing will drive some residents to smaller metro areas away from the coasts
- Demand for apartments in attractive areas will remain strong, driven by the strength of the local economies and lack of affordable ownership options
- Mid-size metro areas that can attract young families are likely to benefit from the rebalancing in the housing market in the wake of lower affordability

Affordability has decreased recently due to higher interest rates after a period of prices outpacing income

Housing affordability index and 30yr fixed mortgage rates



Home prices and income

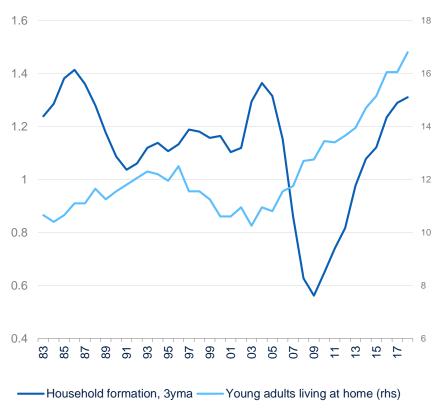


Source: BBVA Research, FHLMC, NAR, CoreLogic, BEA and BLS

But demographics remain supportive due to suppressed household formation and construction after the Great Recession

Household formation and share of young adults living at home

Million and %



Housing starts (estimated for 2018) and population-based trend



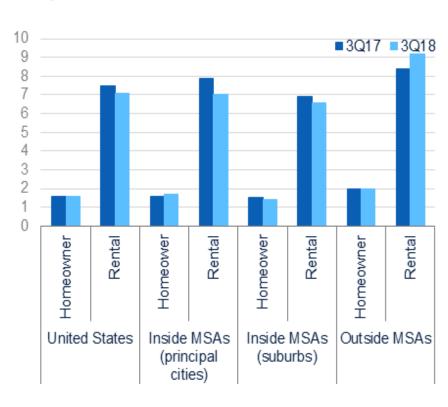


Vacancy rates are at or below trend and declining within metropolitan areas



Vacancy levels





Source: BBVA Research and Census Bureau

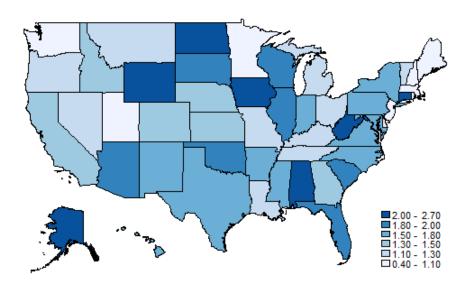
Vacancy rates are low in the West and New England and high in states affected by the energy downturn

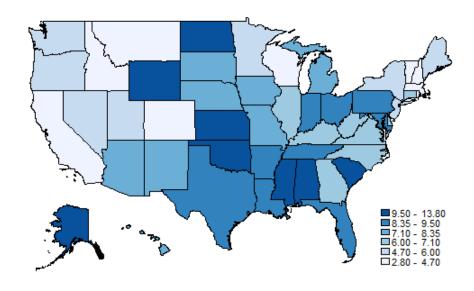
Homeowner vacancy rates

%

Rental vacancy rates

%





MSAs with low vacancy rates have solid economies, while many industrial mid-size MSAs continue to struggle

Homeowner vacancy rates, largest MSAs, 3Q18

%

Lowest 15		Highest 15	
Grand Rapids	0.2	Charleston	3.9
Minneapolis	0.5	Sarasota	2.9
Salt Lake City	0.5	Pittsburgh	2.9
San Antonio	0.6	Cape Coral	2.8
Cleveland	0.6	Hartford	2.8
San Diego	0.6	Toledo	2.7
Nashville	0.6	Rochester	2.7
Omaha	0.7	Tulsa	2.6
San Jose	0.7	Tampa	2.6
Las Vegas	0.7	Richmond	2.4
Greensboro	8.0	Orlando	2.3
Raleigh	8.0	Houston	2.2
Seattle	8.0	Bridgeport	2.0
Atlanta	8.0	Oklahoma City	1.9
Detroit	0.9	Knoxville	1.9

Rental vacancy rates, largest MSAs, 3Q18

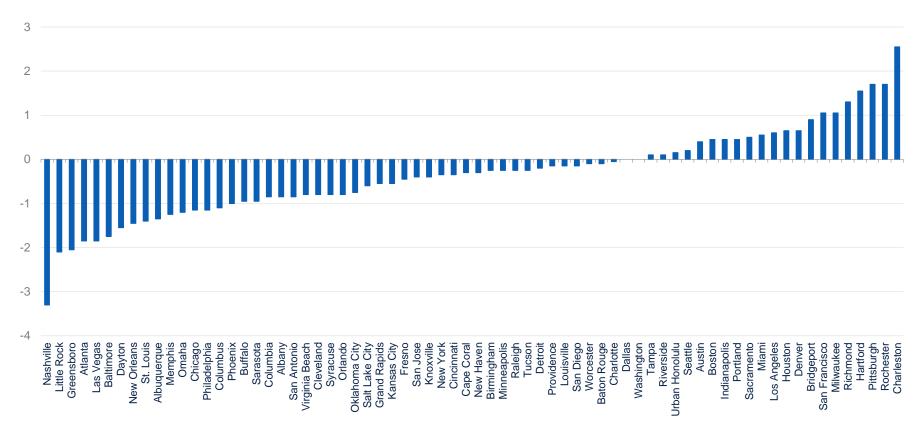
%

Lowest 15		Highest 15	
Fresno	2.0	Charleston	17.6
Worcester	2.3	Toledo	15.5
Denver	3.2	Oklahoma City	13.5
Boston	3.6	Dayton	13.5
Cincinnati	3.6	Birmingham	12.6
Cape Coral	3.7	Tulsa	11.2
San Jose	3.7	Albany	11.0
Allentown	3.9	Little Rock	10.8
Los Angeles	4.0	Memphis	10.4
Grand Rapids	4.4	Tampa	10.4
Sacramento	4.4	Greensboro	10.3
San Diego	4.4	Columbia	10.2
Syracuse	4.5	Baltimore	10.2
Minneapolis	4.6	New Orleans	10.1
Providence	4.6	Houston	9.4

Homeowner vacancy rates have decreased significantly in many affordable MSAs

Homeowner vacancy rates, largest MSAs, change 1H2015 – mid-2018

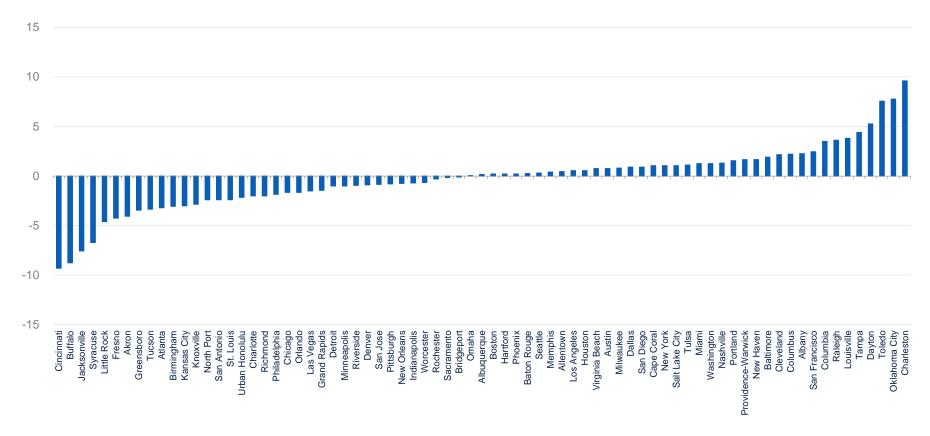




Rental vacancies have also decreased strongly in mid-size MSAs with solid economic fundamentals and lack of new construction

Rental vacancy rates, largest MSAs, change 1H2015 - mid-2018





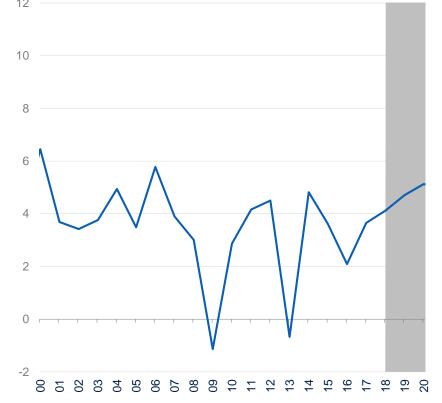
Demand will be supported by leveling off of interest rates and an increase in income

30yr mortgage interest rates



Personal disposable income per capita



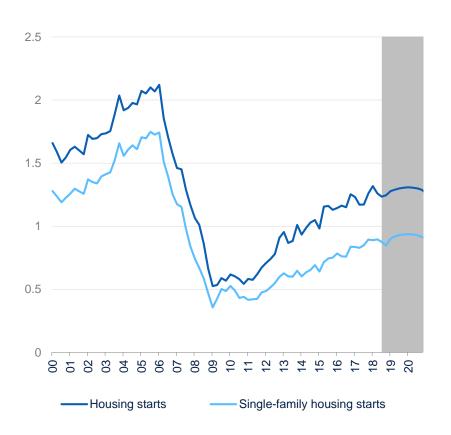


Source: BBVA Research, FHLMC, Census Bureau and BEA

Construction of new units will increase less than in the past due to structural factors

Housing starts

Million



Multifamily housing starts

Thousands and %

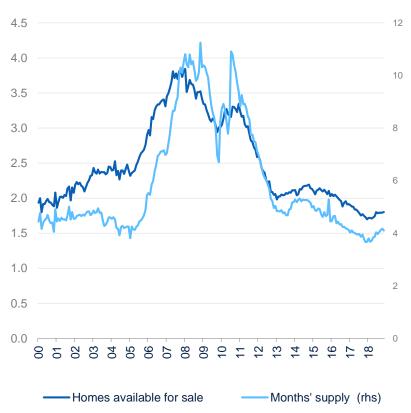


Source: BBVA Research and Census Bureau

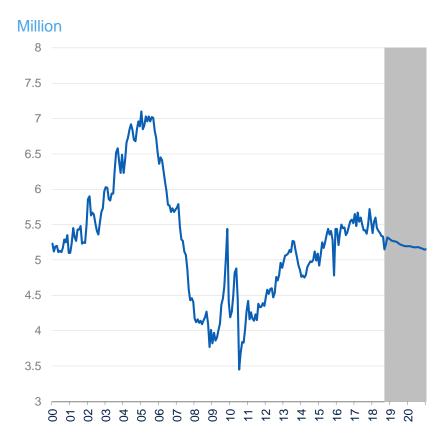
Existing home sales will remain on a downward trend due to suppressed supply amid higher interest rates

Homes available for sale and months' supply, seasonally adjusted





Existing home sales

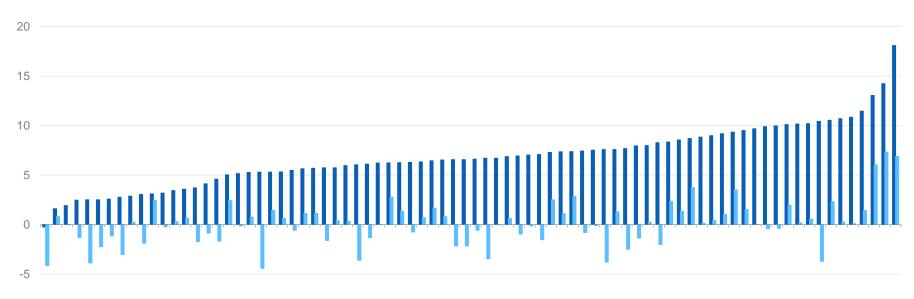


Source: BBVA Research and NAR

Home prices are still increasing at a solid rate

Home prices, 80 largest MSAs

% YoY and percentage points change in growth YoY



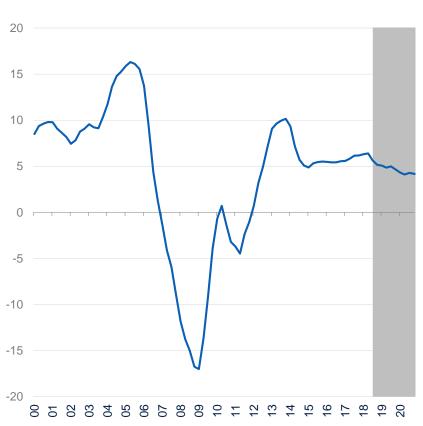
Little Rock
Bridgeport
Harfford
New Orleans
Baton Rouge
Abuquerque
McAllen
Syracuse
Virginia Baech
McAllen
Syracuse
Virginia Bach
McAllen
McAllen
McAllen
McAllen
Syracuse
Virginia Bach
McAllen
McAllen
McAllen
McAllen
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Douisville
Luuisville
Luuisville
Luuisville
Bakersfield
Louisville
Fresno
Allentown
Memphis
Greensboro
Allendon
Cleveland
Baktonio
Akron
Cloumbus
Memphis
Claricate
Columbus
Memphis
Claricate
Columbus
Memphis
Claricate
Columbus
Minneapolis
Dayton
Columbus
Minneapolis
Dayton
Columbus
Minneapolis
Dayton
Riverside
Los Angeles
Detroit
Greenville
Miami
Phoenix
Nashville
Stockton
Orlando
Seattle
San Lake City
Tampa
Colorado Springs
San Jose
San Jose
San Jose
San Jose
San Fancisco
Las Nagas

Source: BBVA Research and FHFA

But the slowdown in price appreciation will continue as a result of low affordability in many locations

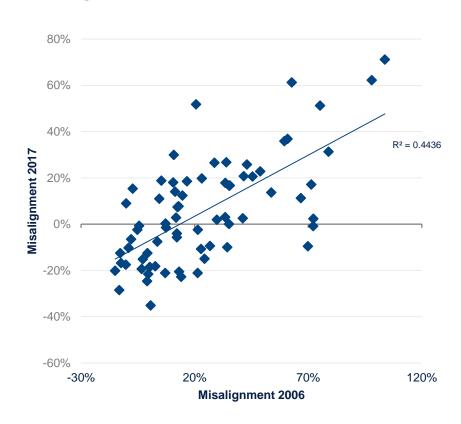
CoreLogic home price index





BBVA Home Price Misalignment Index

% misalignment from fundamentals

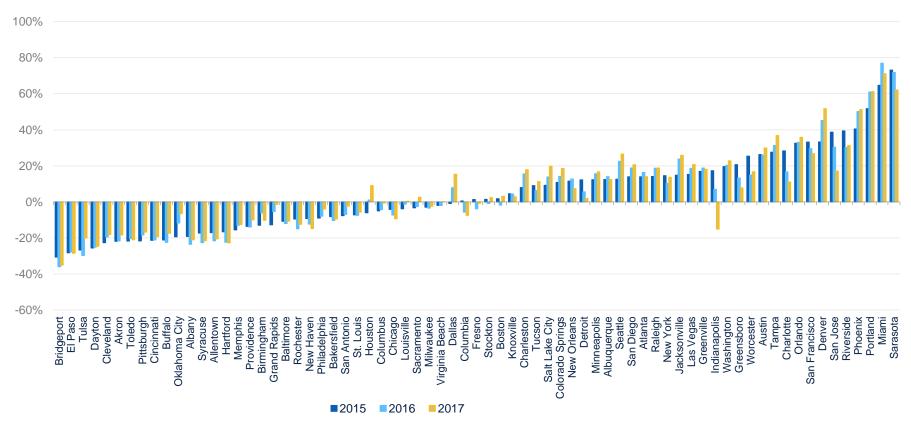


Source: BBVA Research and CoreLogic

Home prices by MSA show some misalignment from their fundamentals, but the regional disparities are decreasing

BBVA Home Price Misalignment Index

% misalignment from fundamentals



Source: BBVA Research

Forecasts

	2015	2016	2017	2018 (f)	2019 (f)
Building permits (Million)	1.18	1.21	1.29	1.32	1.35
Housing starts (Million)	1.11	1.18	1.21	1.26	1.29
New home sales (Thousand)	503	560	616	627	636
Existing home sales (Million)	5.23	5.44	5.54	5.37	5.24
CoreLogic home price index (% YoY)	5.3%	5.5%	5.9%	5.9%	4.9%
Median home price (\$)	220	232	246	257	268
Affordability (Index 100=Median income qualifies for mortgage of a median priced home)	168.0	168.5	159.3	147.9	142.0
30Y mortgage rate (%)	3.9	3.6	4.0	4.5	4.9

Source: BBVA Research

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