

# Economic and Housing Outlook

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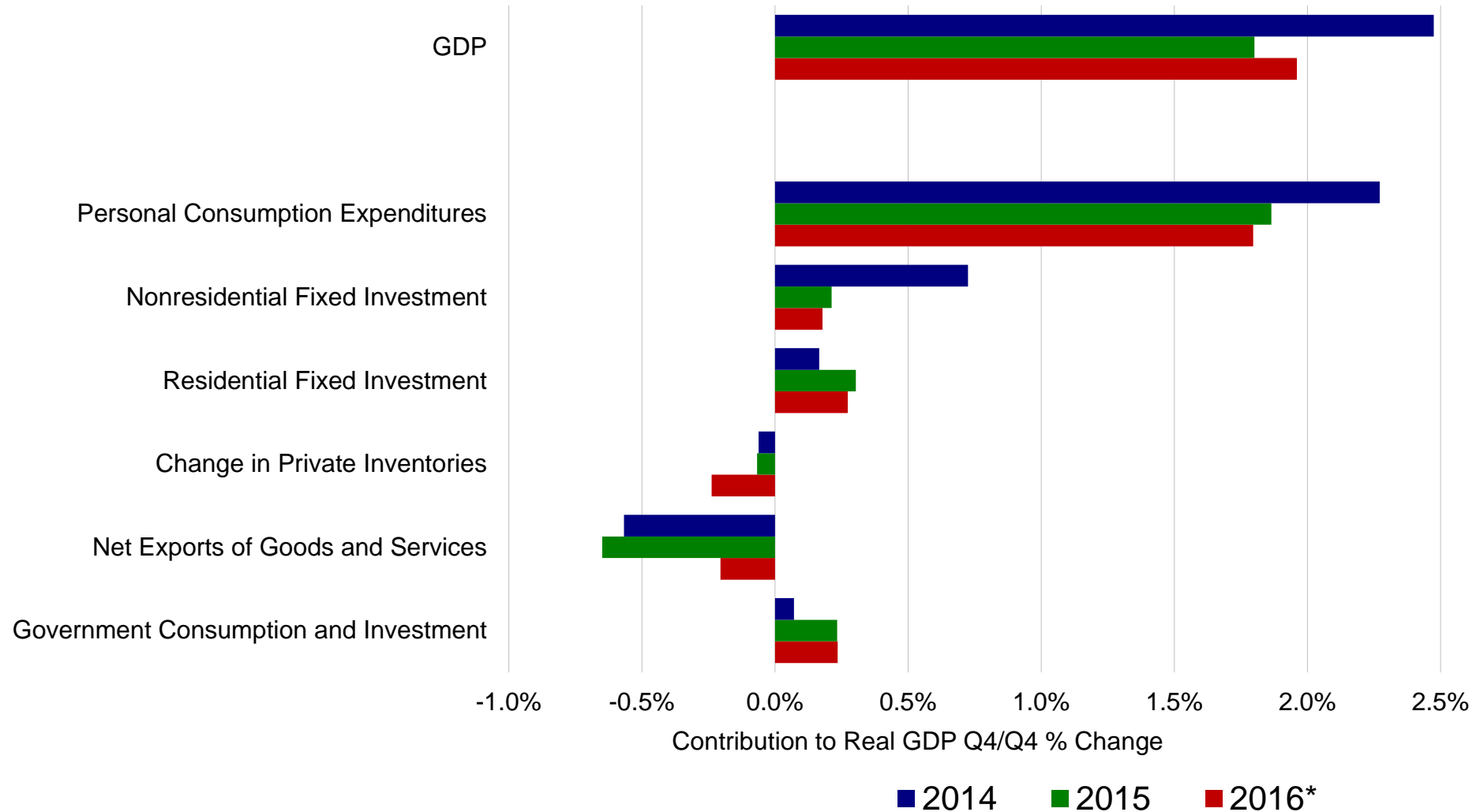
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## Macroeconomic Developments

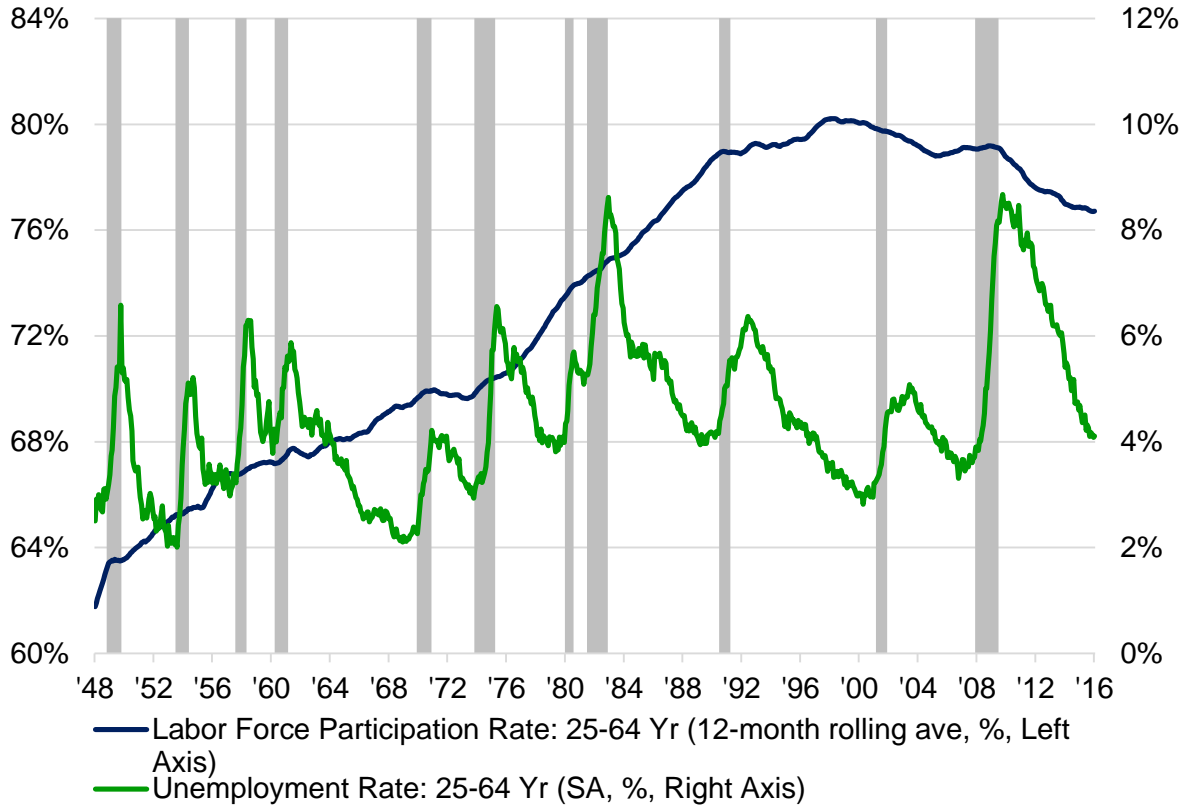
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## Consumers Remain the Principal Source of Growth

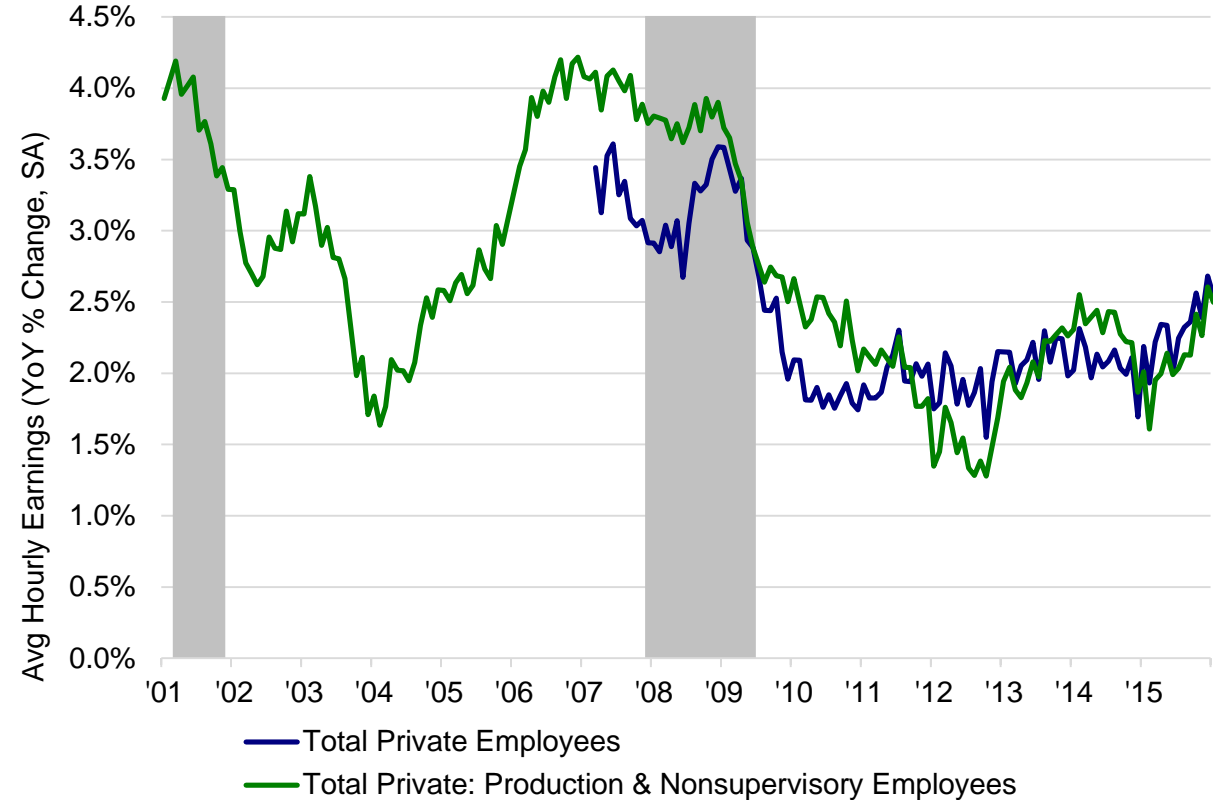


# Labor Conditions Are Improving

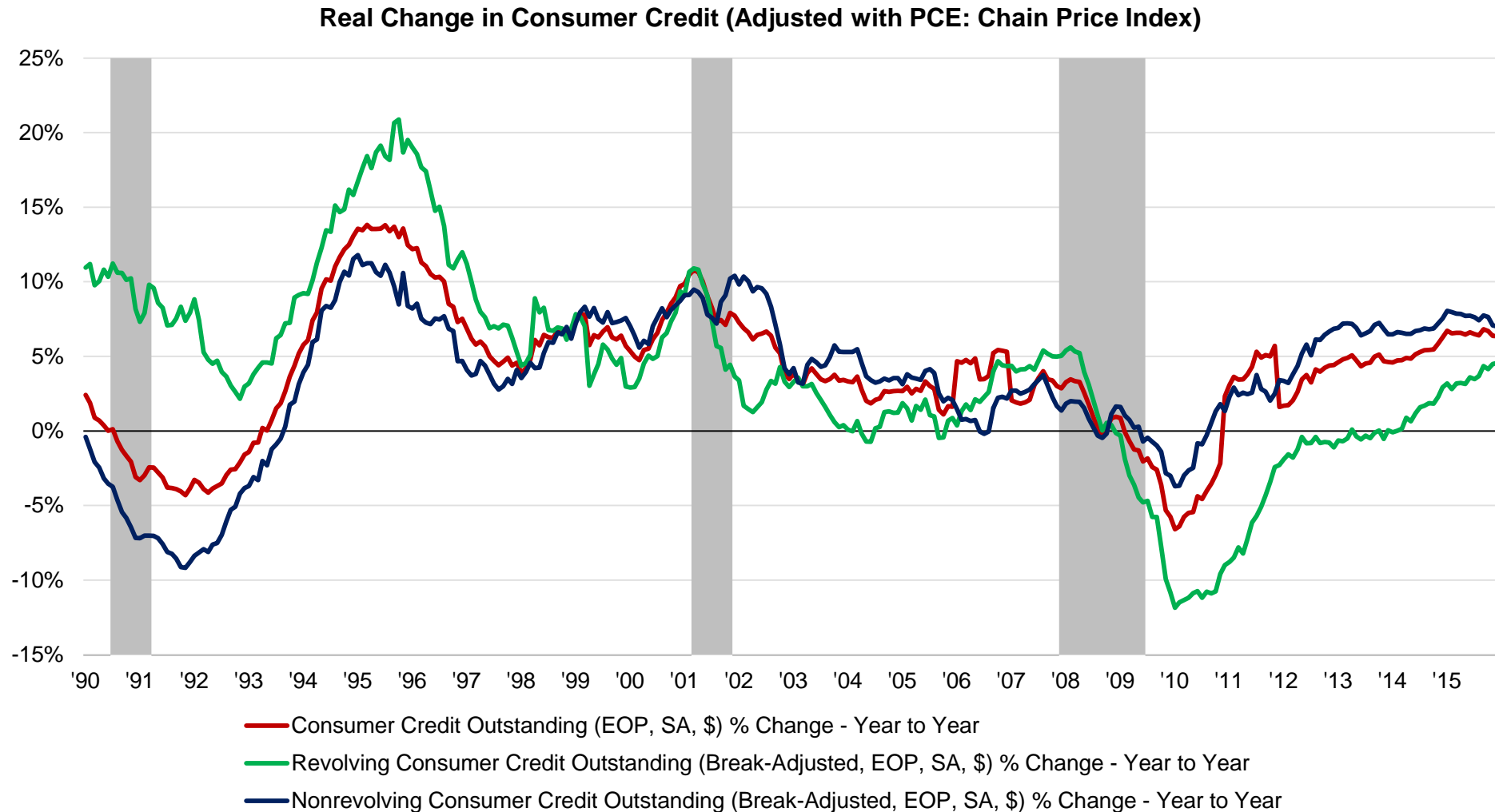
**Low Unemployment Rate Overstates the Health of the Job Market**



**Wage Growth Subdued, but Builds Momentum**



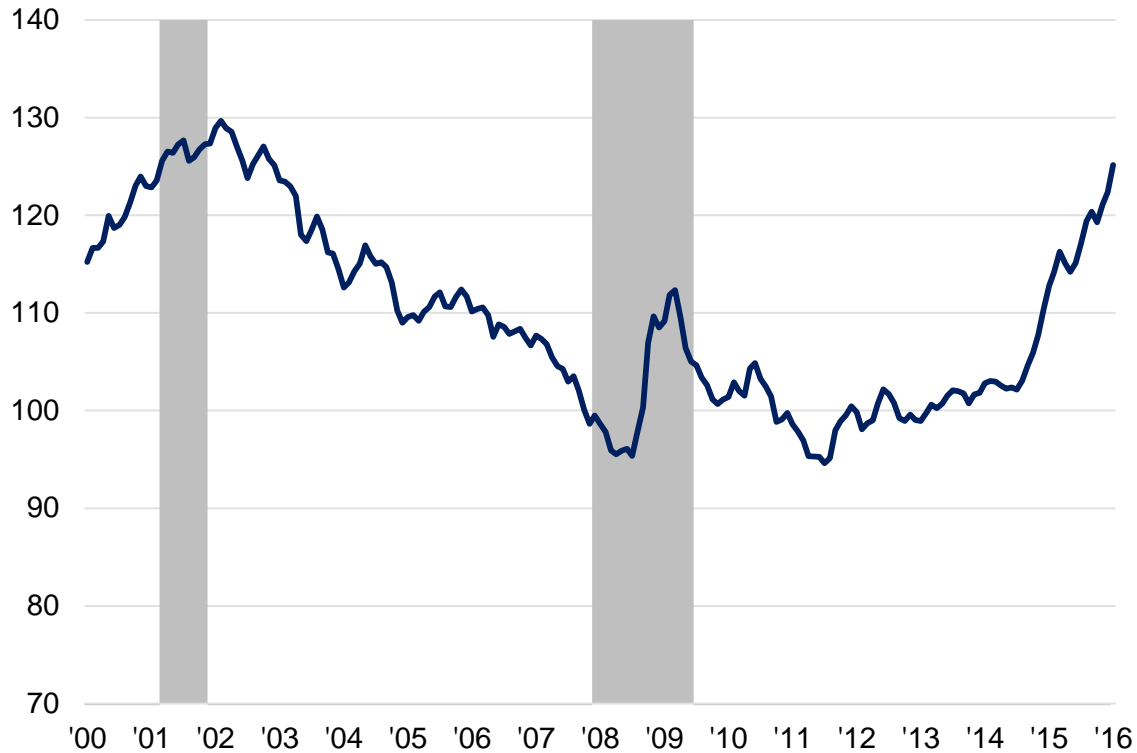
# Revolving Consumer Credit Rises in Real Terms



Note: Revolving Credit includes credit card credit and balances outstanding on unsecured revolving lines of credit. Nonrevolving credit includes secured and unsecured credit for automobiles, mobile homes, trailers, durable goods, vacations, and other purposes. Consumer credit excludes loans secured by real estate (such as mortgage loans, home equity loans, and home equity lines of credit).

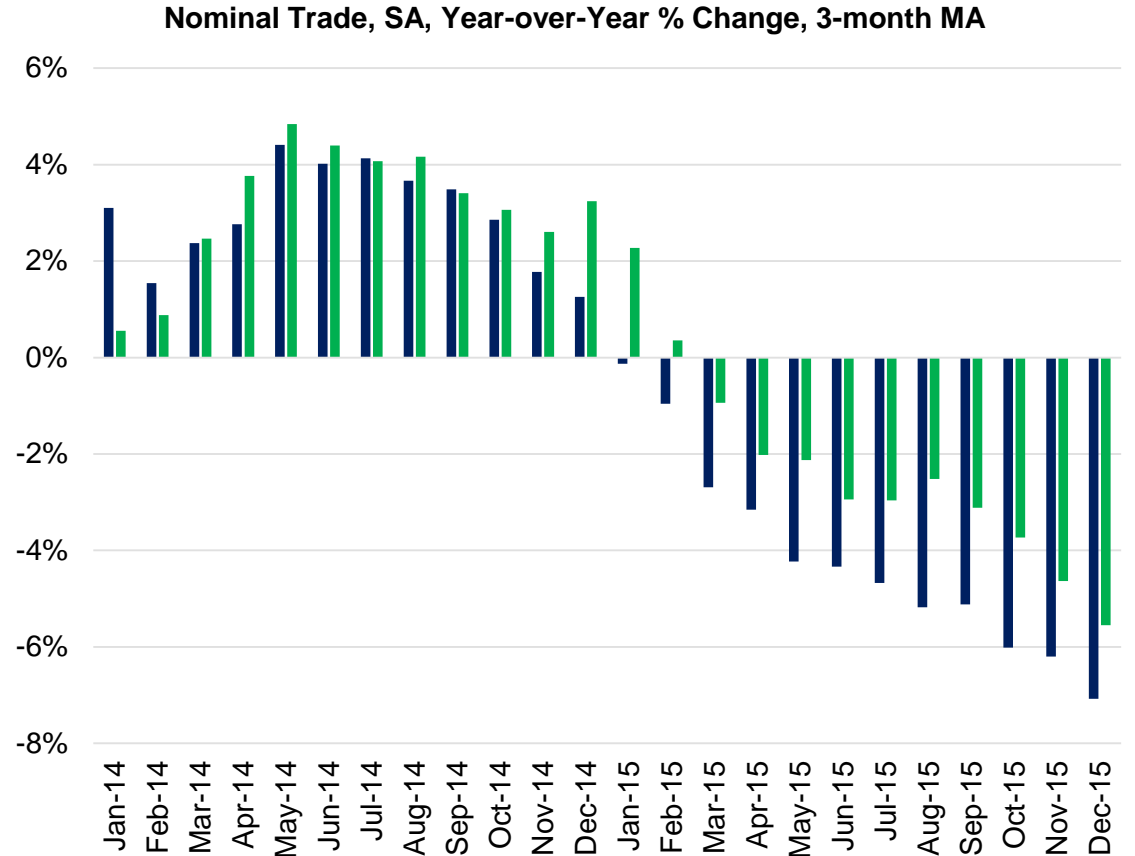
# The Strengthening Dollar is Contributing to a Reduction in Trade

The Dollar Pushes Higher



— Nominal Broad Trade-Weighted Exchange Value of the US\$ (Jan-97=100)

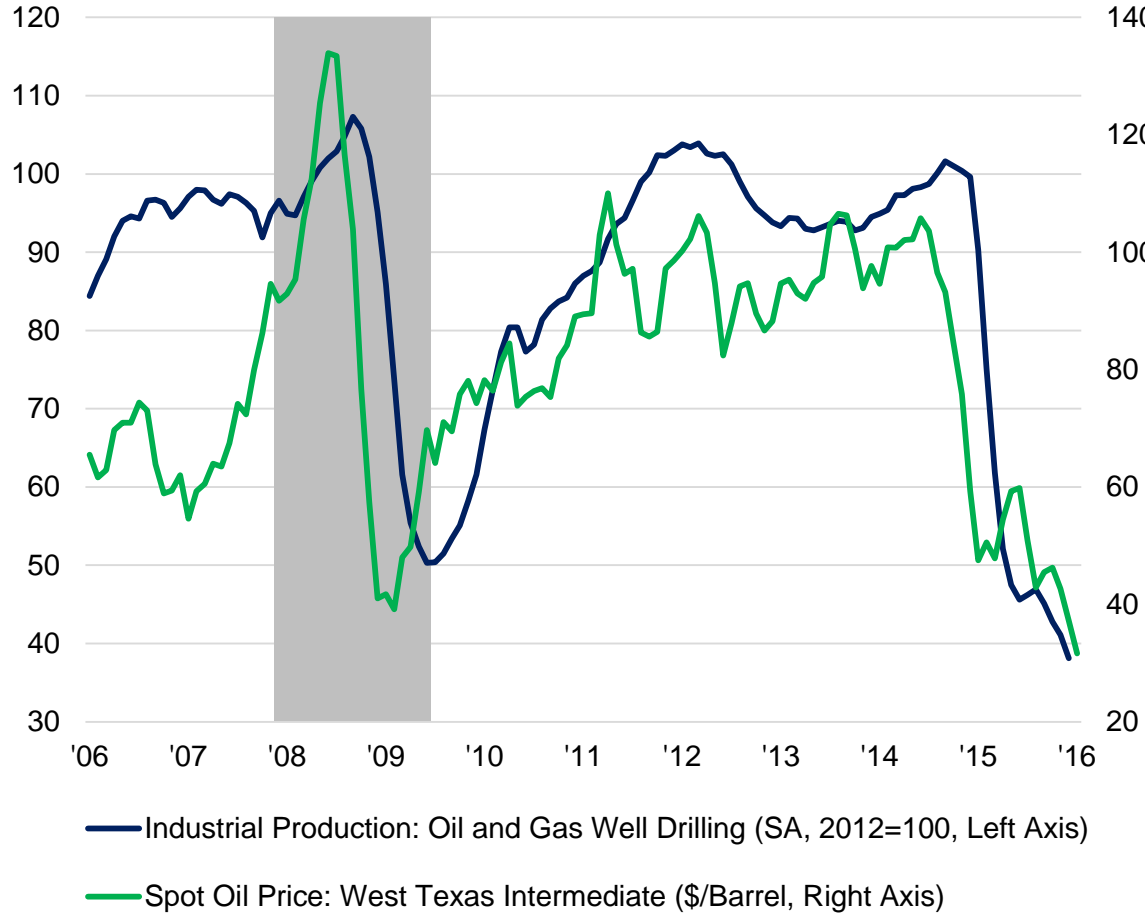
U.S. Trade Fell Throughout 2015



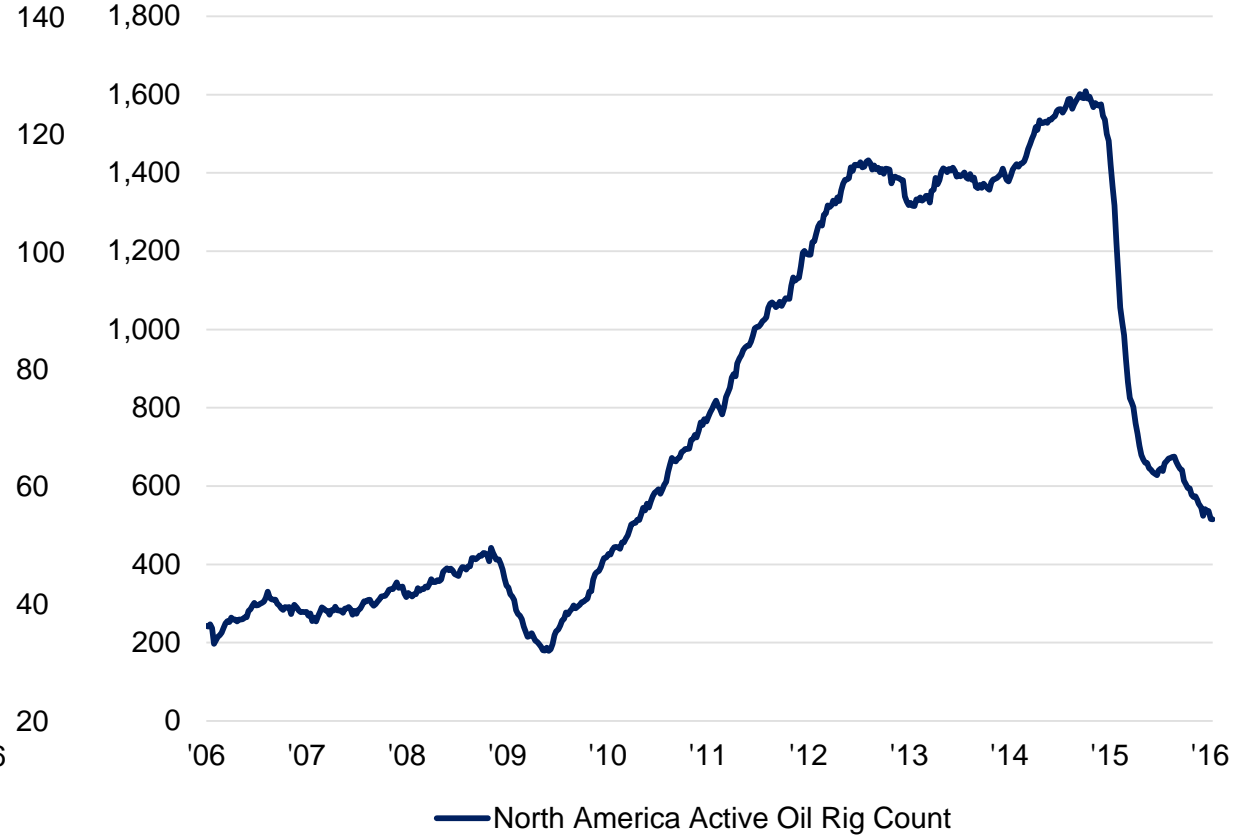
■ Exports ■ Imports

# Oil and Gas Investments Decline Amid Low Oil Prices

Oil and Gas Well Drilling Production Mirrors the Last Recession



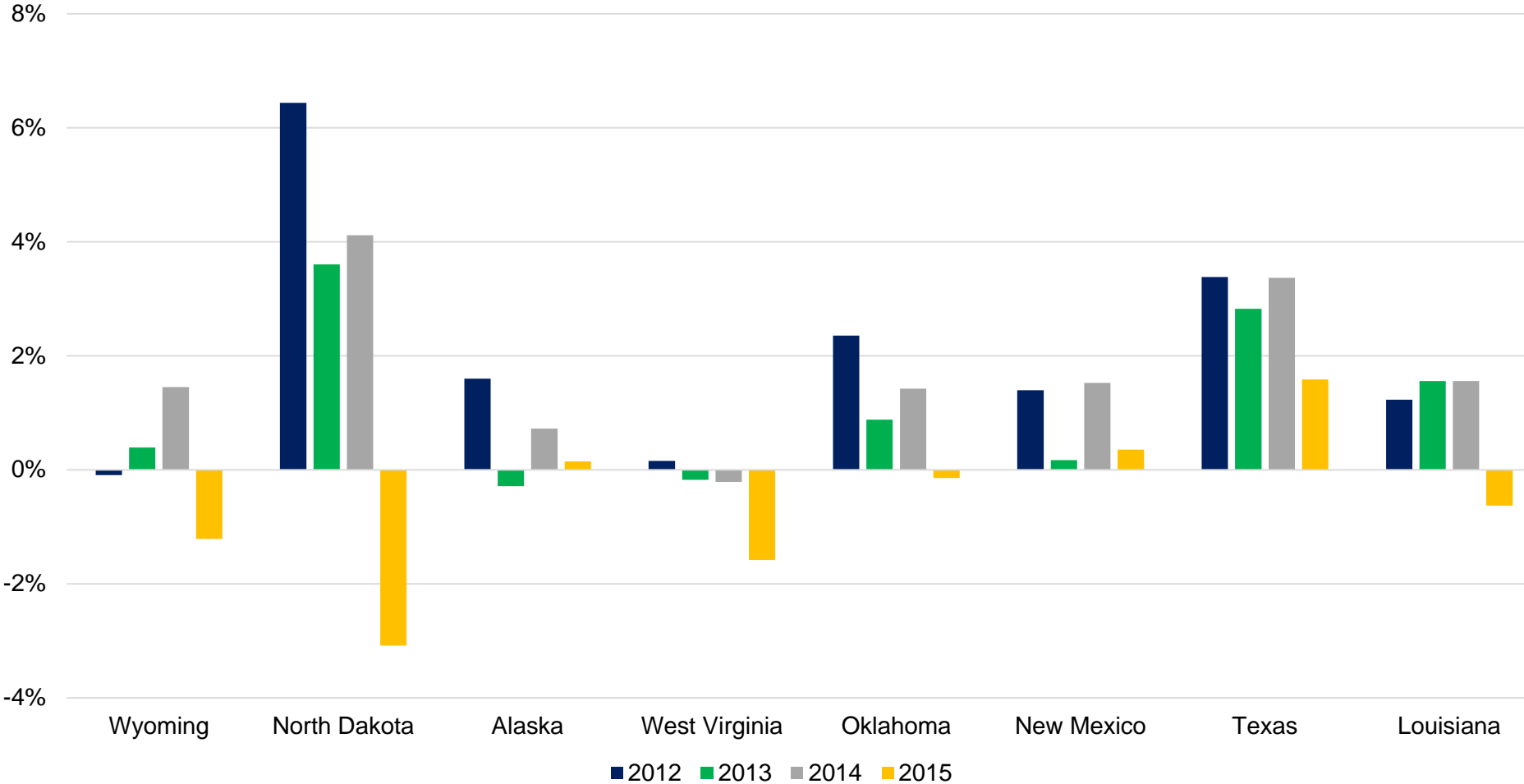
Oil Rig Count Plummets





# Employment Slowing in Oil Producing States

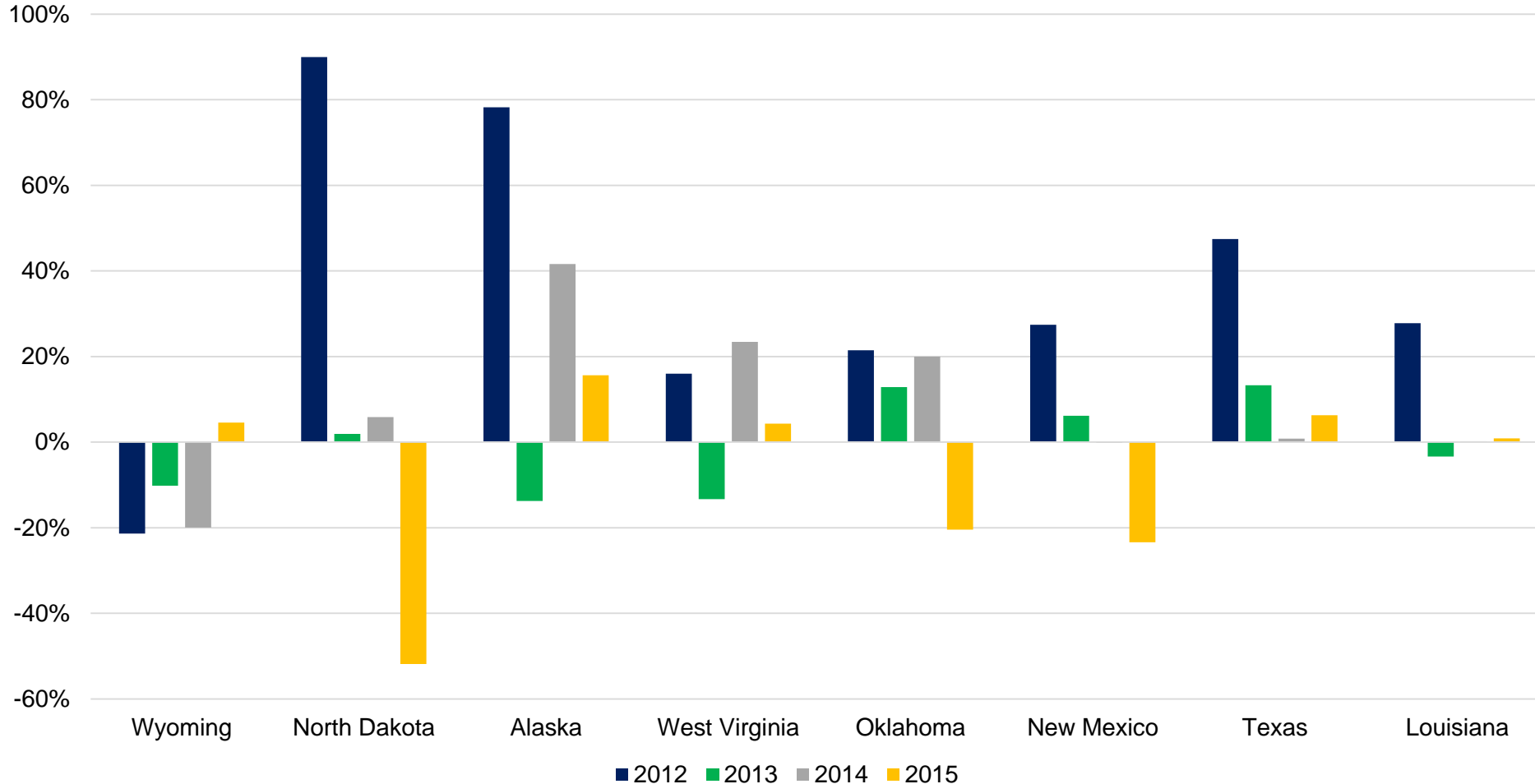
Change in Total Private Payroll Employment in Oil Producing States (Q4/Q4)



	Share of Payroll Employment in Mining & Logging in 2015
Wyoming	8%
North Dakota	6%
Alaska	5%
West Virginia	4%
Oklahoma	3%
New Mexico	3%
Texas	3%
Louisiana	2%

# A Few of the Prime Oil Producing States Are Seeing Less Construction Activity

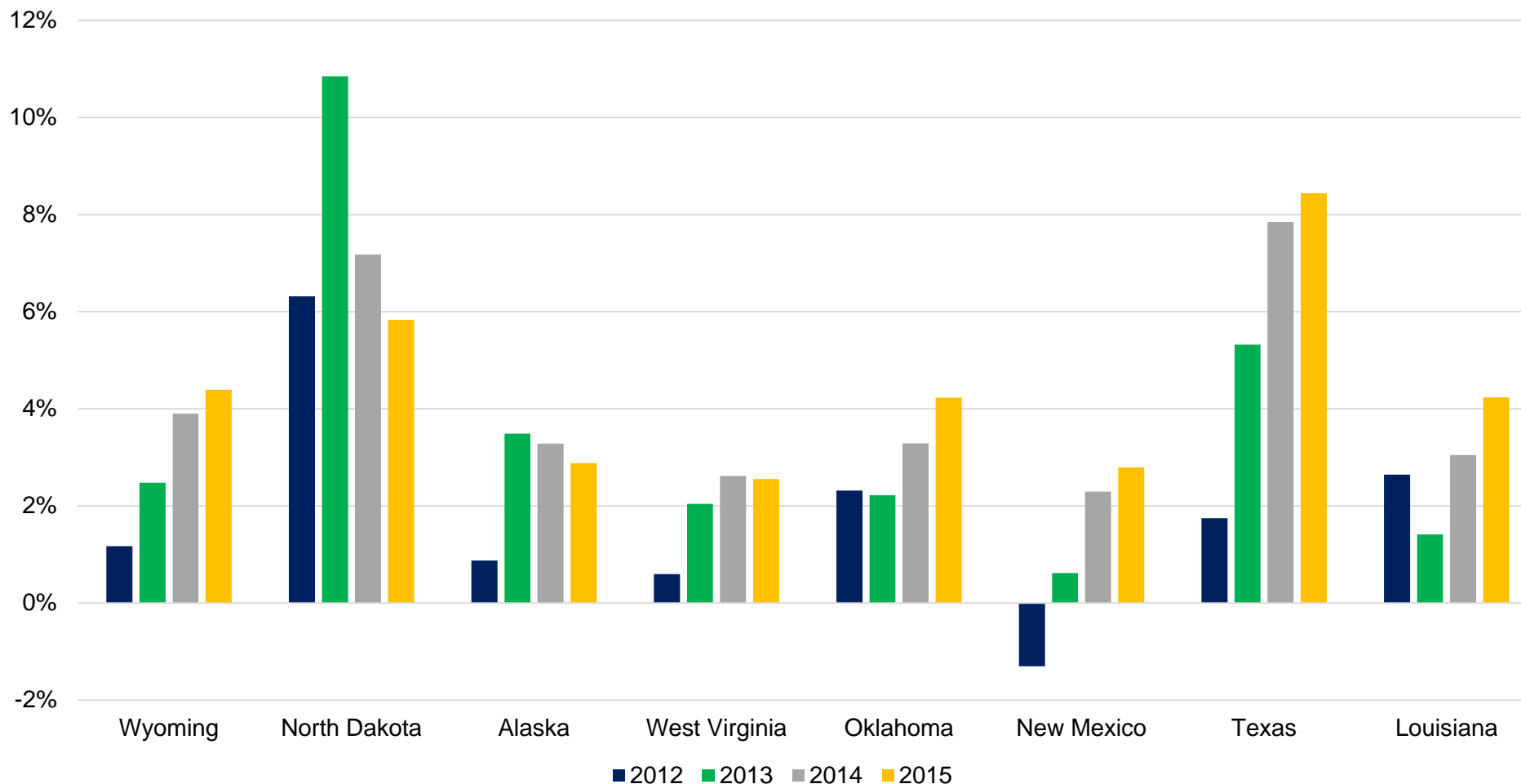
Change in Housing Starts (Q4/Q4)



	Share of Payroll Employment in Mining & Logging in 2015
Wyoming	8%
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Alaska	5%
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New Mexico	3%
Texas	3%
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# North Dakota, Alaska, and West Virginia Begin to See Slowdown in Home Price Growth

Change in FHFA HPI (Q3/Q3)

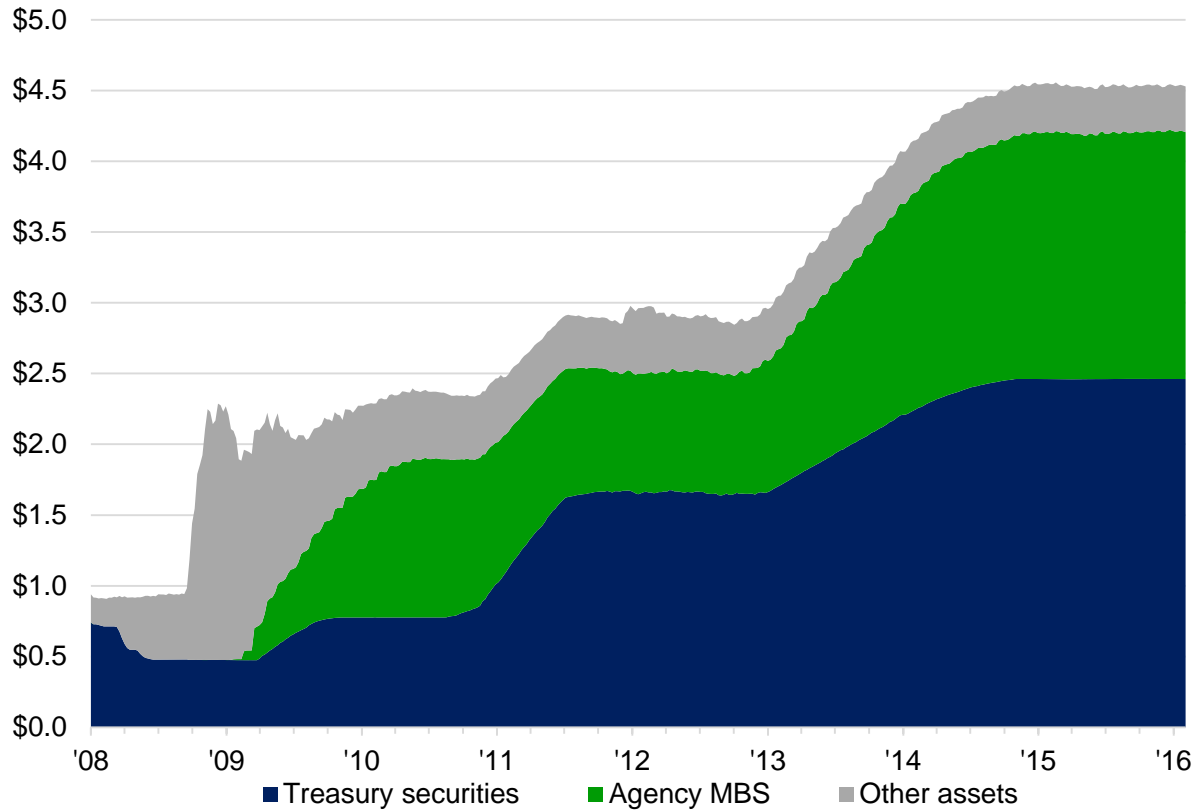


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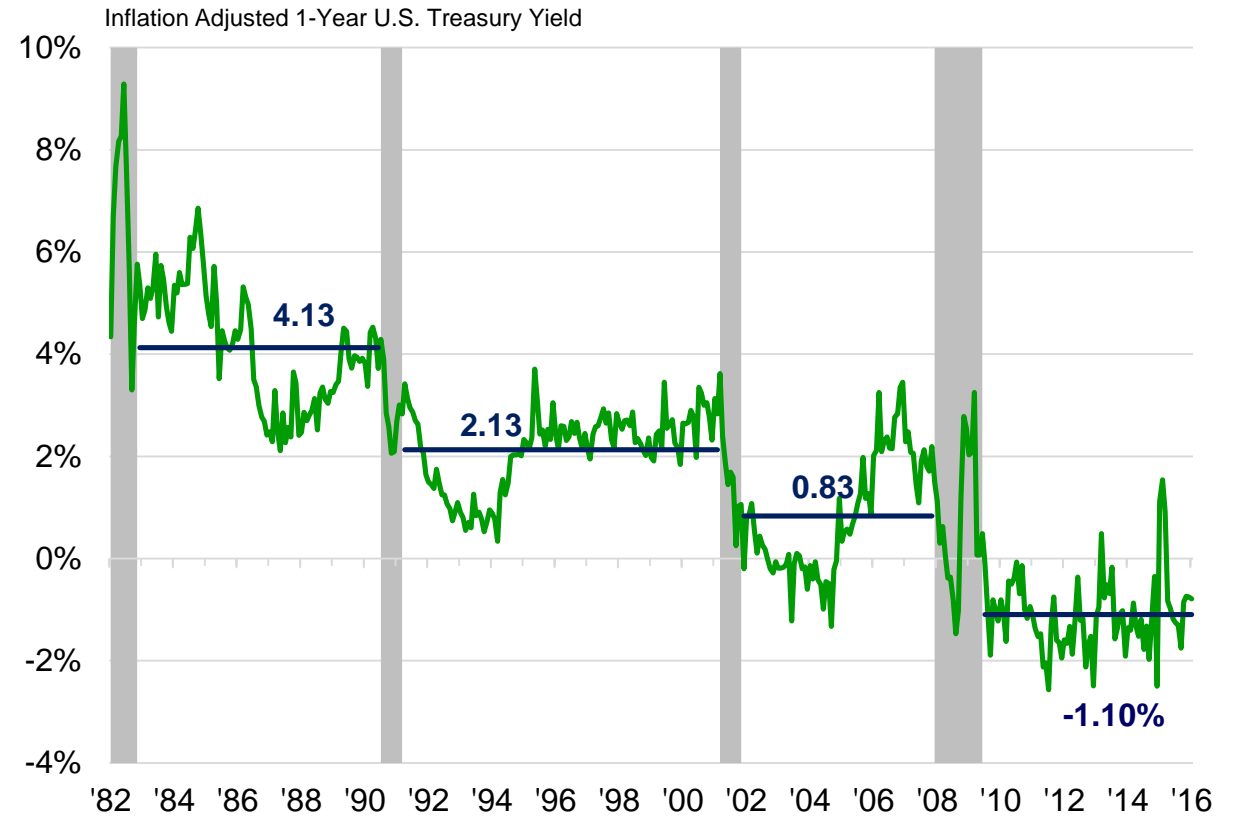
Note: Q3 2015 FHFA HPI is the latest data available.

# The Fed and Interest Rates

The Fed Expected to Talk About Its Balance Sheet Later This Year



Real Interest Rates Have Trended Lower for Over Three Decades



## 2016 Economic Outlook – Moderate Economic Growth Continues

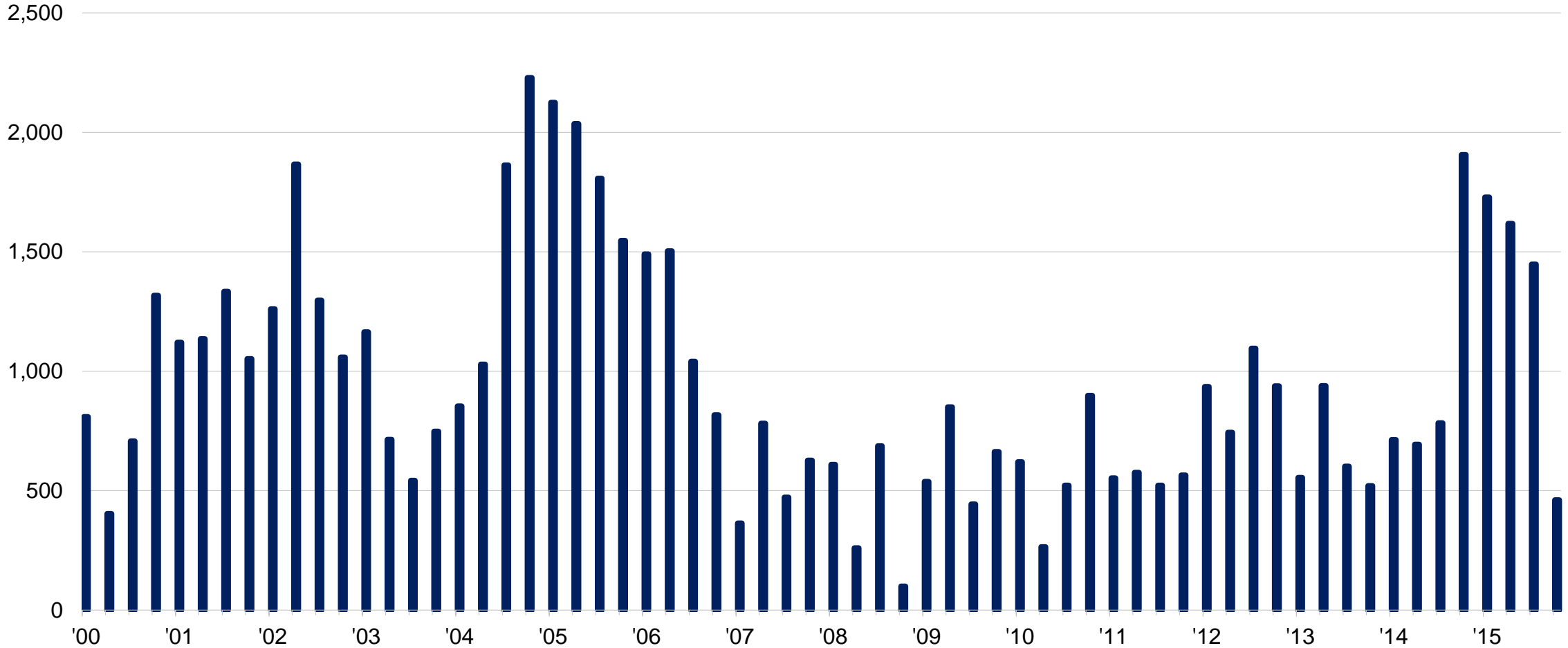
	February 2016 forecast
Real GDP Annual Growth	2.0%
Unemployment Rate (Year-end)	4.8%
Core CPI (Year-end)	1.8%
10-Year Treasury Bond Yield (Year-end)	2.1%

## Housing/Mortgage Market

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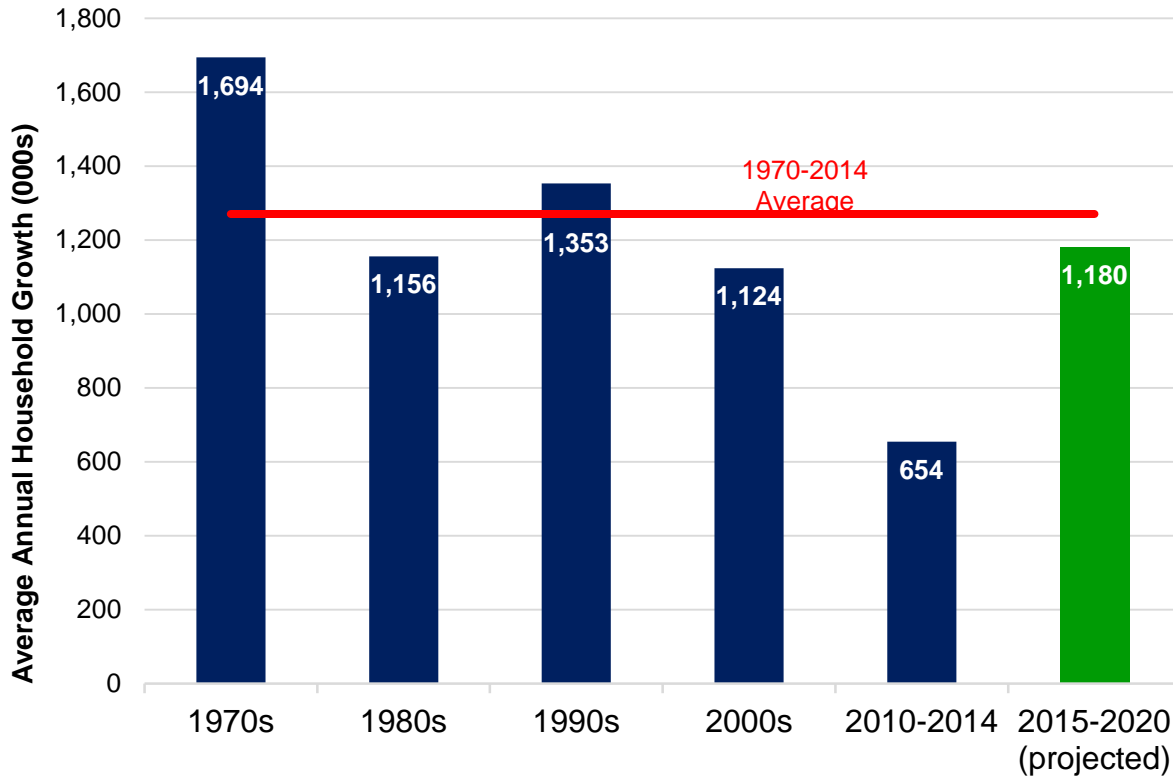
# Household Formation Ends an Otherwise Impressive 2015 on a Soft Note

Total Number of Households, Break-adjusted (Thous) Change – Year-to-Year

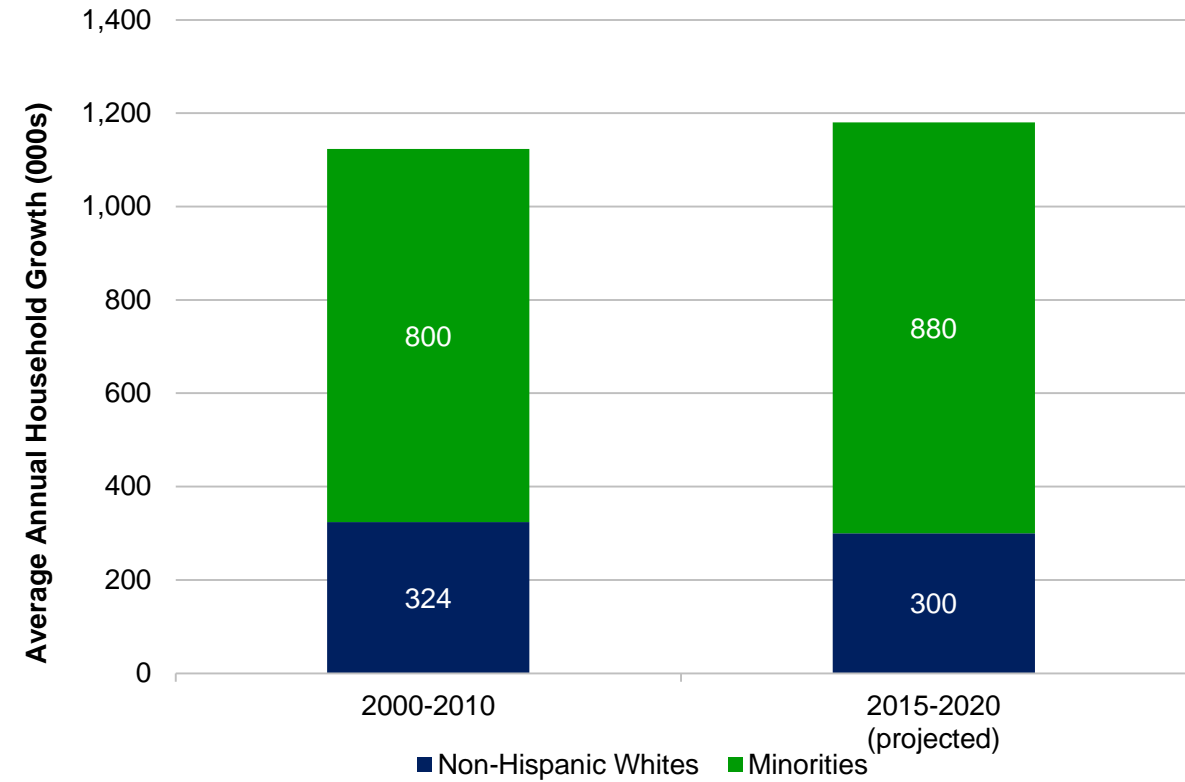


# Projected Household Growth is Picking Up and Its Composition is Changing

Household Growth is Starting to Rebound in the Second Half of Decade



Racial and Ethnic Minorities Should Continue to Account for the Bulk of Household Growth

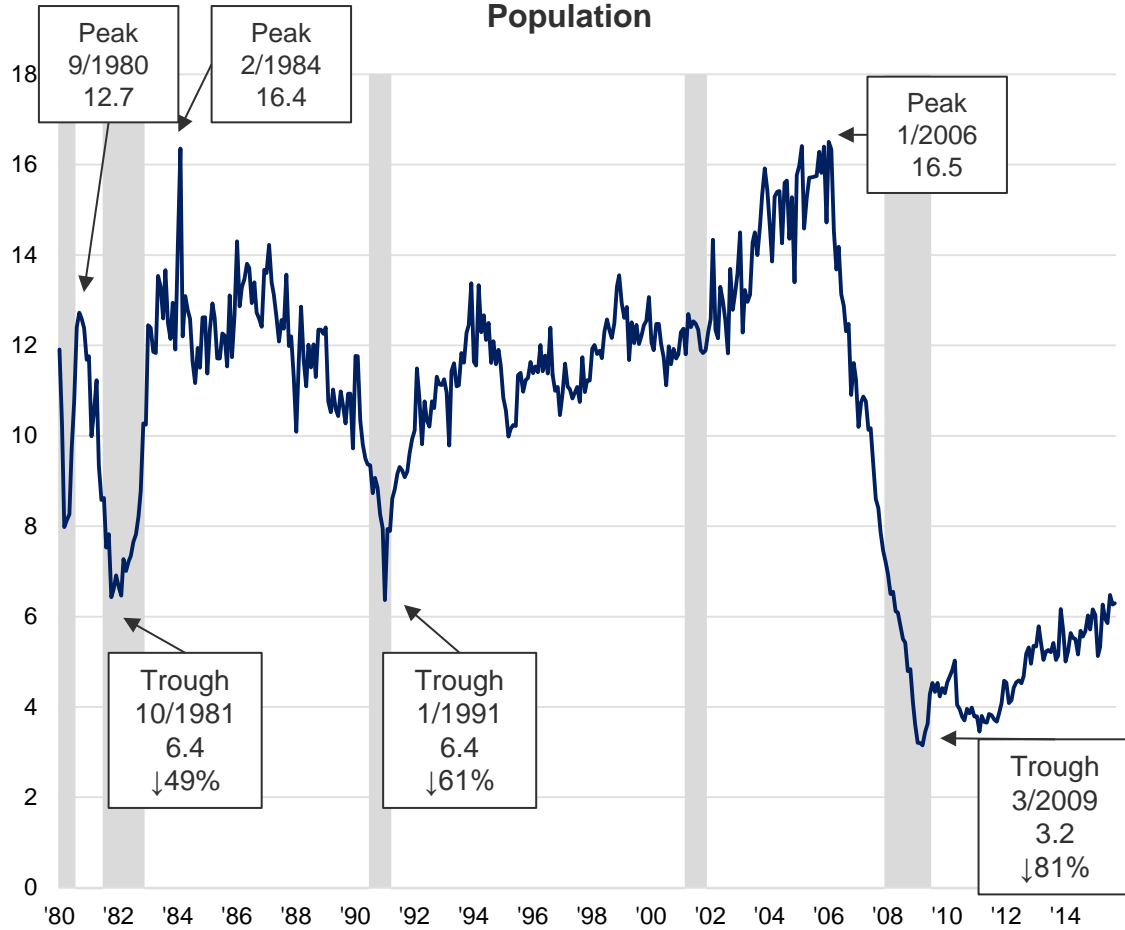


Historical data (blue) end in 2014 because that is the last year for which ACS data are available.



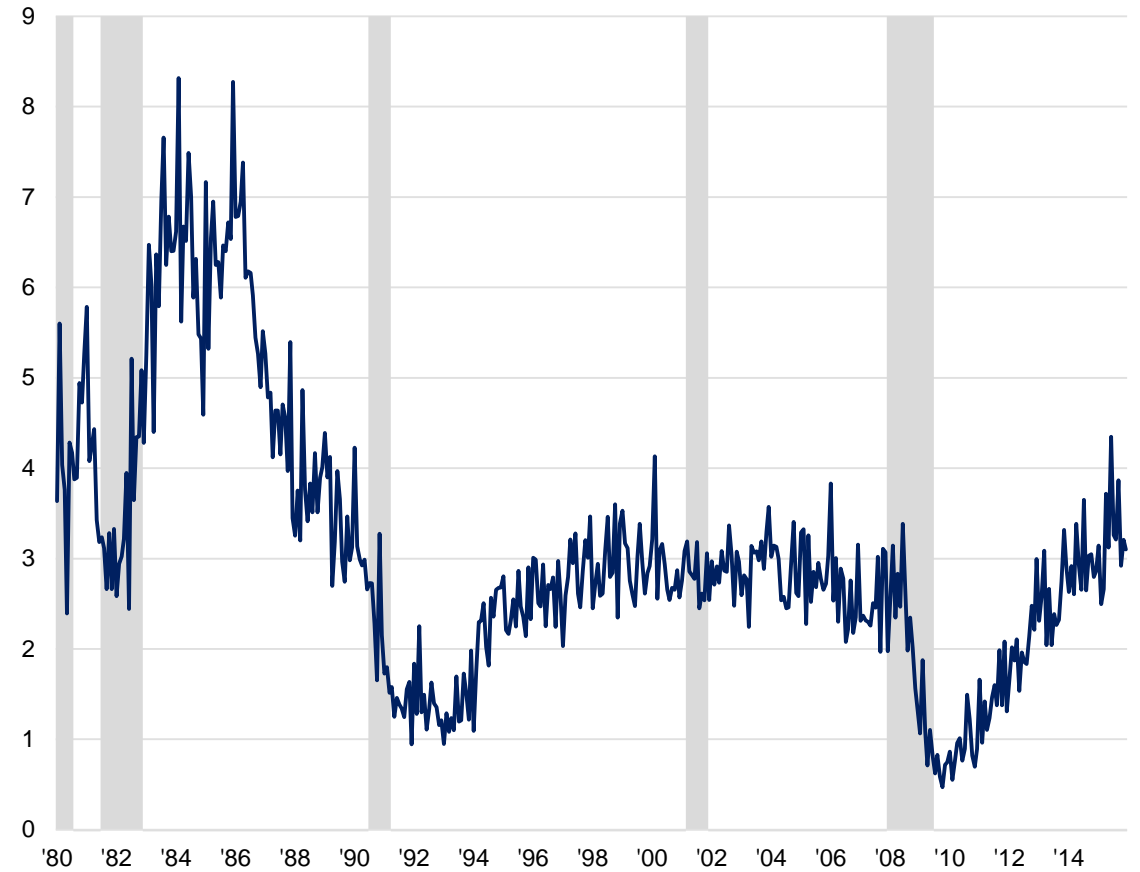
# Single-Family Housing Supply is Still Well Below Historical Norms

### Tight Supply of Single-Family Construction Compared to Population



— Number of Single-Family (1-Unit, SAAR) Housing Starts Per 1000 Household

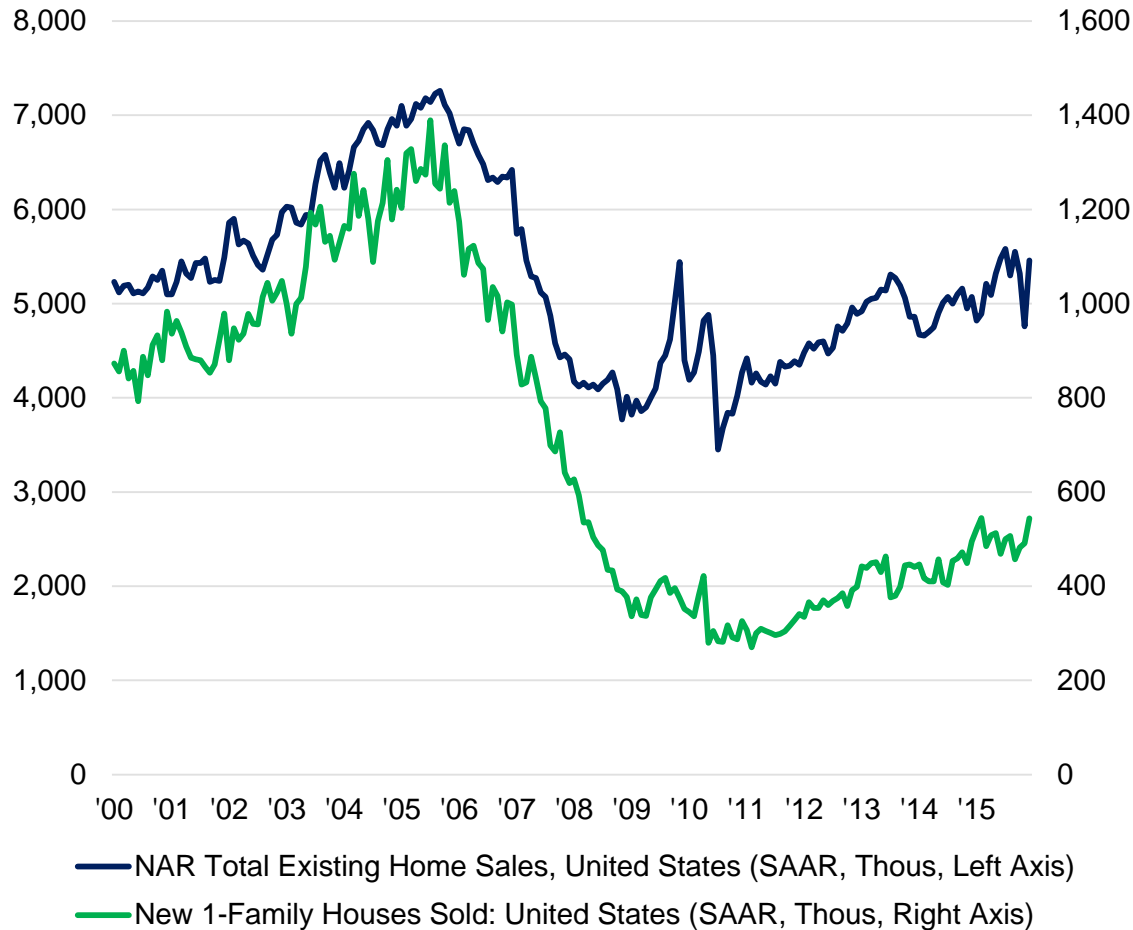
### Multifamily Construction Picks Up the Pace



— Number of Multifamily Housing Starts (5+ units, SAAR) Per 1000 Households

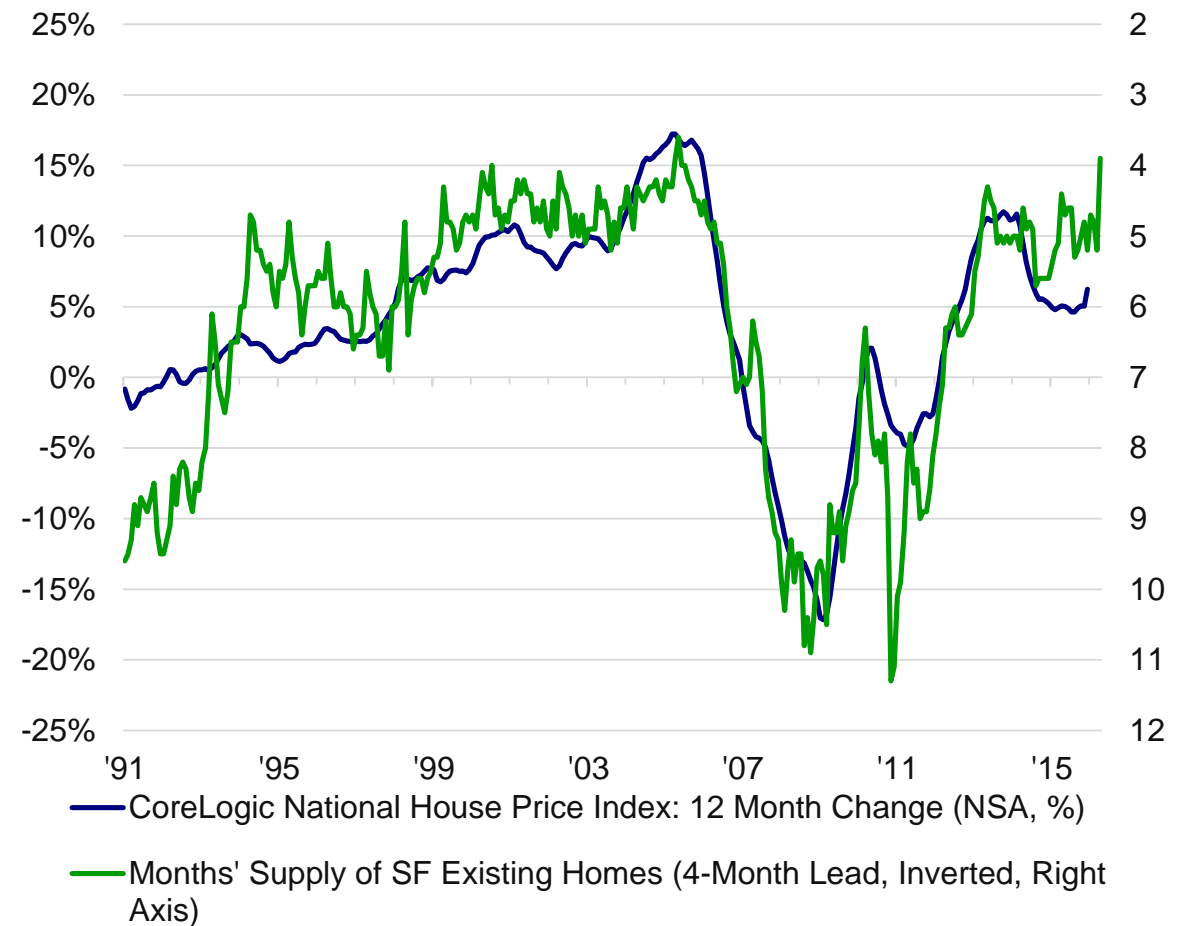
# Housing Demand is Moving Ahead of Supply

Existing Home Sales Bounce Back in December, New Home Sales Growth Recovering Slowly

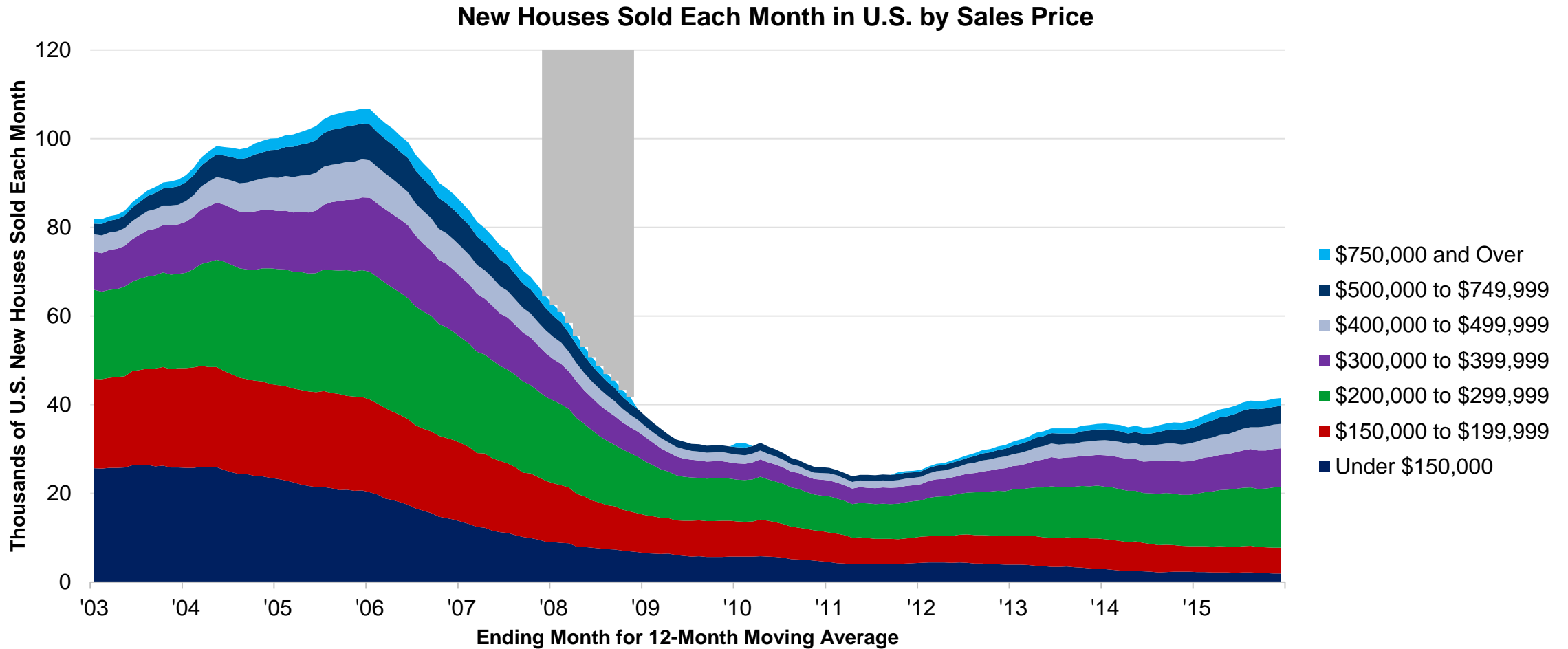


Note: Single-Family includes 1-4 unit structures

Tight Supply May Further Support Home Price Growth



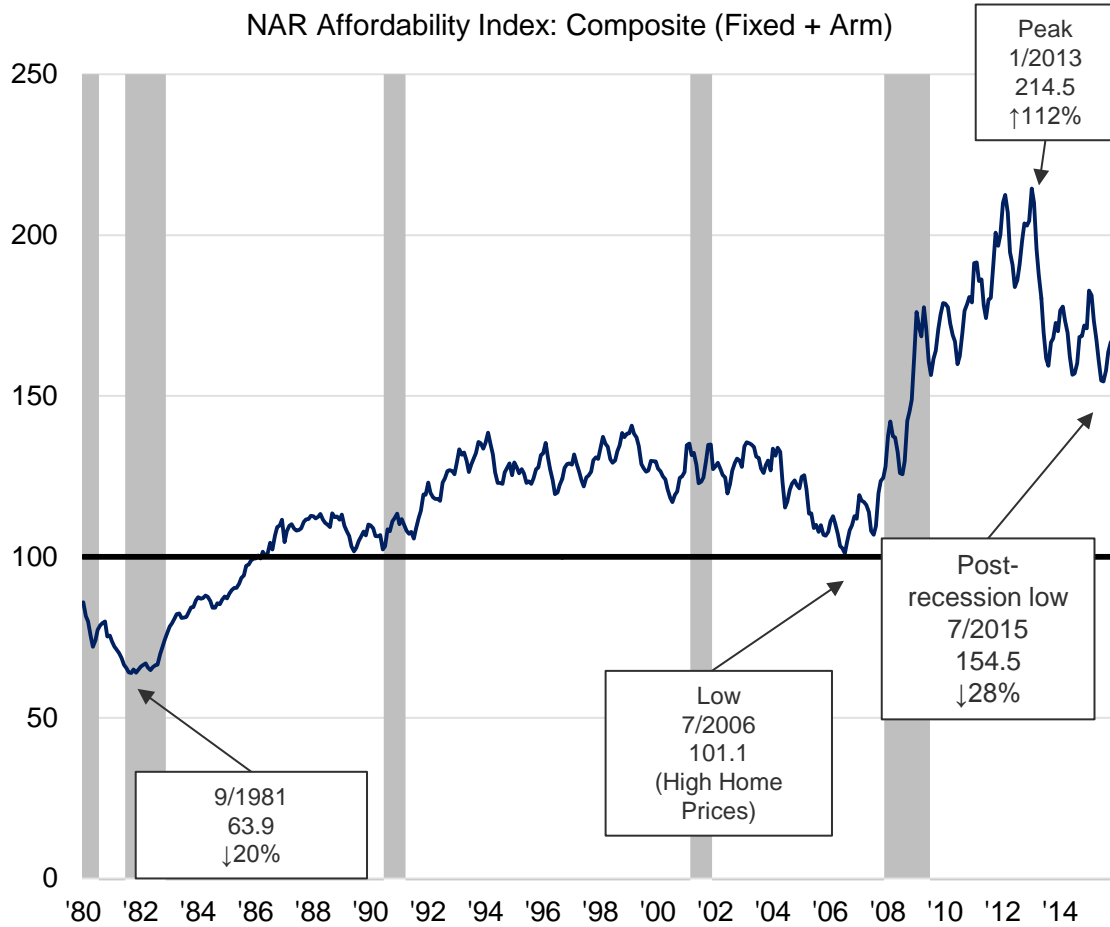
## New Homes Sales Growth Concentrated at Higher Price Points



# Housing Affordability Moves to the Forefront

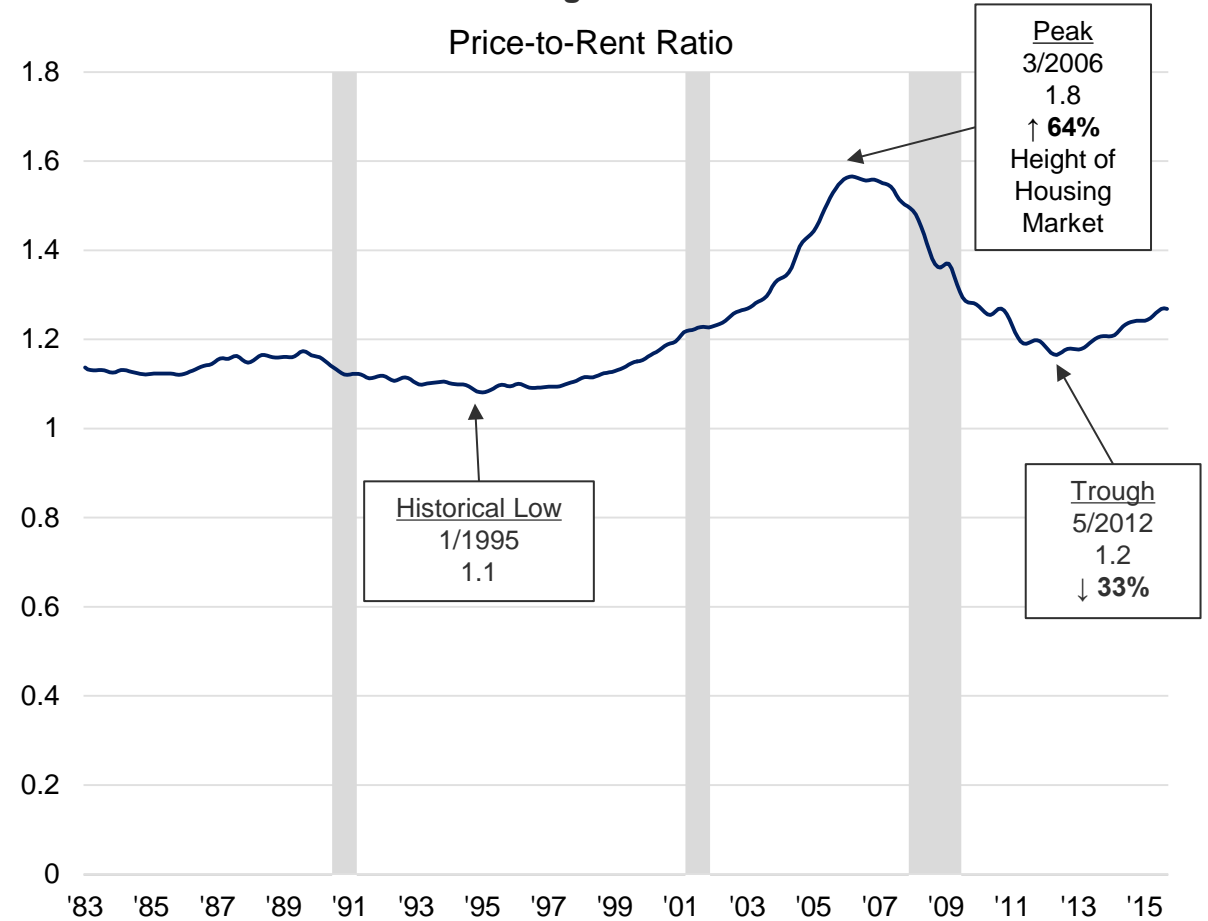
**Affordability Still Above Normal, but Declining**

NAR Affordability Index: Composite (Fixed + Arm)



**Real Home Price Rising Faster Than Real Rents, but Real Rents Rising as Well**

Price-to-Rent Ratio



— Price-to-rent ratio, (Ratio of FHFA/BLS) for United States

Note: Price-to-Rent: The ratio is calculated by dividing the FHFA repeat-purchase home price index by the U.S. Bureau of Labor Statistics (BLS) consumer price sub-index on Owner's Equivalent Rent

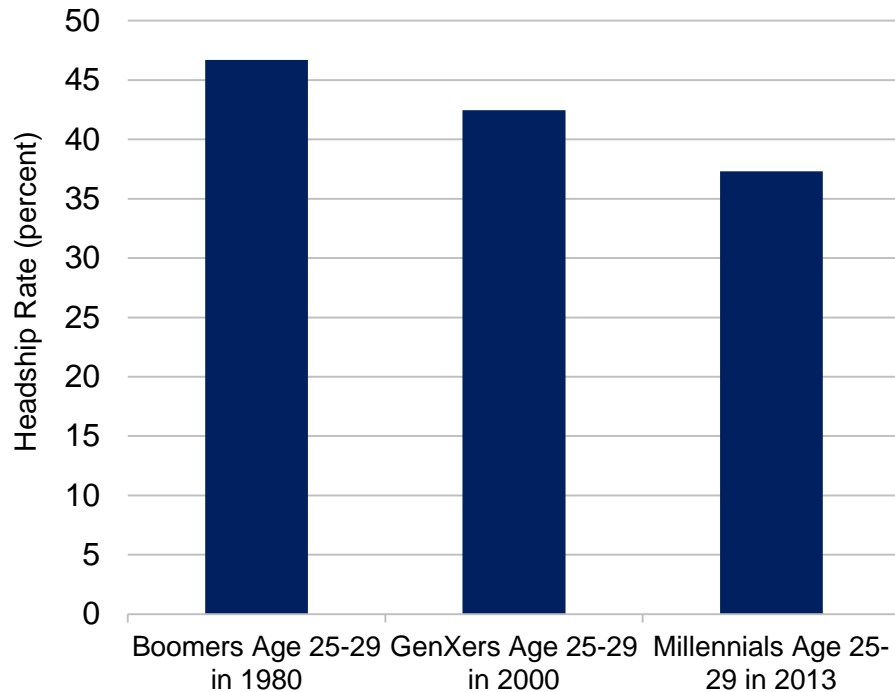
## Continuing to See Faster Home Price Appreciation Among Moderately Priced Homes

MSA Name	Low Tier Year-over-Year % Change	Mid Tier Year-over-Year % Change	High Tier Year-over-Year % Change	Low - Mid Tier Change	Low - High Tier Change
Atlanta	7.95%	7.55%	4.93%	▲ 0.40%	▲ 3.02%
Boston	8.09%	5.66%	3.80%	▲ 2.43%	▲ 4.29%
Chicago	7.13%	2.99%	0.01%	▲ 4.14%	▲ 7.12%
Denver	16.30%	11.24%	8.15%	▲ 5.06%	▲ 8.15%
Las Vegas	7.95%	7.81%	4.20%	▲ 0.14%	▲ 3.75%
Los Angeles	8.82%	6.79%	4.72%	▲ 2.03%	▲ 4.10%
Miami	11.79%	9.17%	6.44%	▲ 2.62%	▲ 5.35%
Minneapolis	8.17%	5.72%	1.73%	▲ 2.45%	▲ 6.44%
New York	4.47%	3.83%	2.40%	▲ 0.64%	▲ 2.07%
Portland	13.77%	10.58%	9.43%	▲ 3.19%	▲ 4.34%
Phoenix	11.53%	7.24%	3.70%	▲ 4.29%	▲ 7.83%
San Diego	9.88%	6.16%	5.22%	▲ 3.72%	▲ 4.66%
San Francisco	10.93%	10.42%	10.97%	▲ 0.51%	▼ -0.04%
Seattle	8.95%	8.52%	9.28%	▲ 0.43%	▼ -0.33%
Tampa	16.11%	8.53%	4.92%	▲ 7.58%	▲ 11.19%
Washington DC	3.61%	2.10%	1.22%	▲ 1.51%	▲ 2.39%

Note: Percentage change in S&P/Case-Shiller Home Price Index (SA) from October 2014 to October 2015.

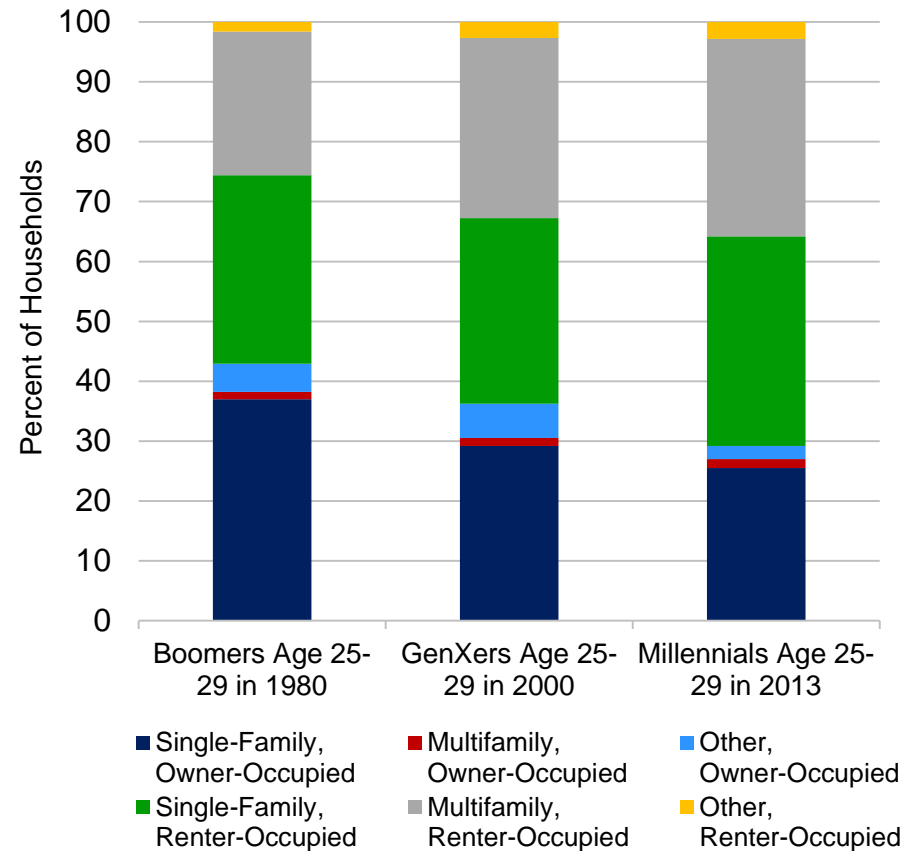
# Millennial Housing Demand has been Subdued Compared with Previous Generations

**Millennials are Less Likely to Form Households Than Their Predecessors**



The headship rate, a commonly used metric of household formation, is the proportion of the population in a given age group that is a householder, i.e., the person, or one of the persons, in whose name a housing unit is owned, being bought, or rented. "Single-family" is 1 to 4 units in structure, "multifamily" is 5+ units in structure, and "Other" is predominantly manufactured/mobile homes.

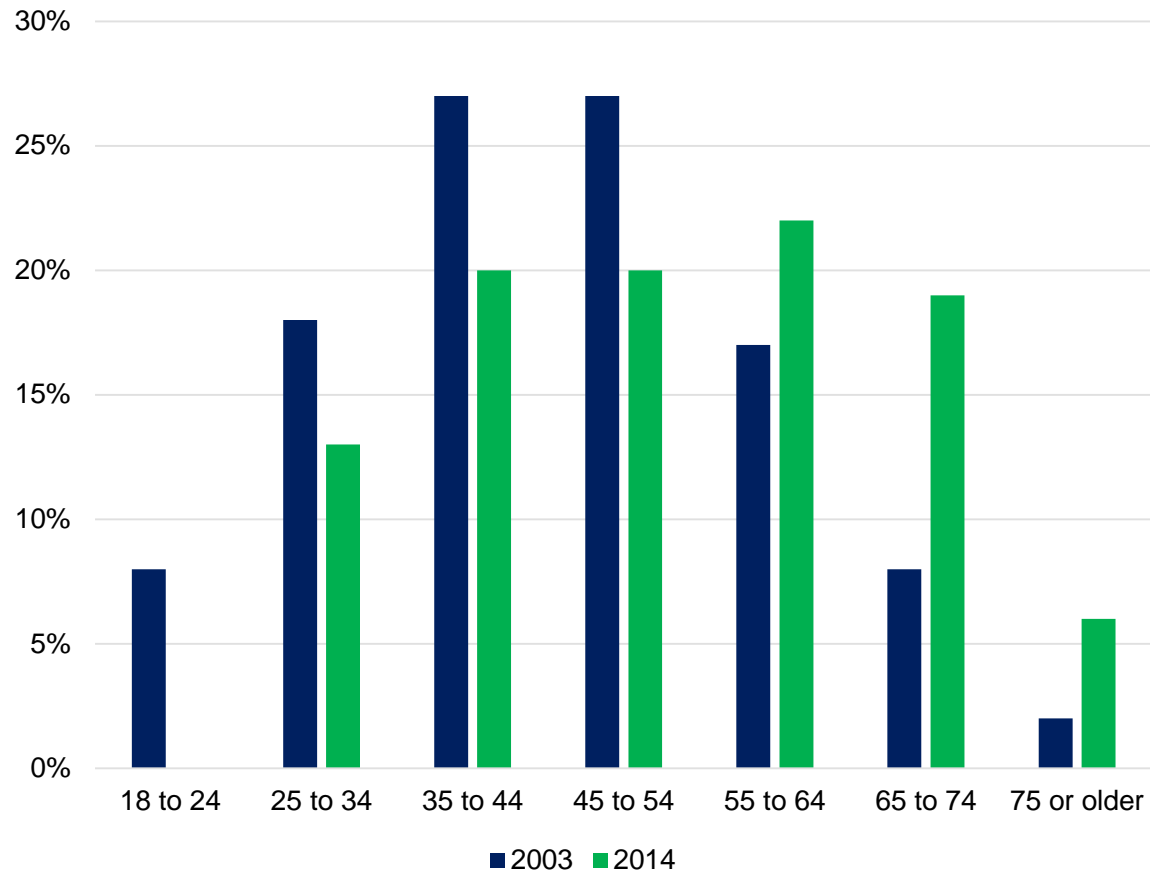
**When They Do Form Households, They are More Likely to Rent, Particularly Single-Family Homes**



## A Notable Increase in the Age of Repeat Buyers

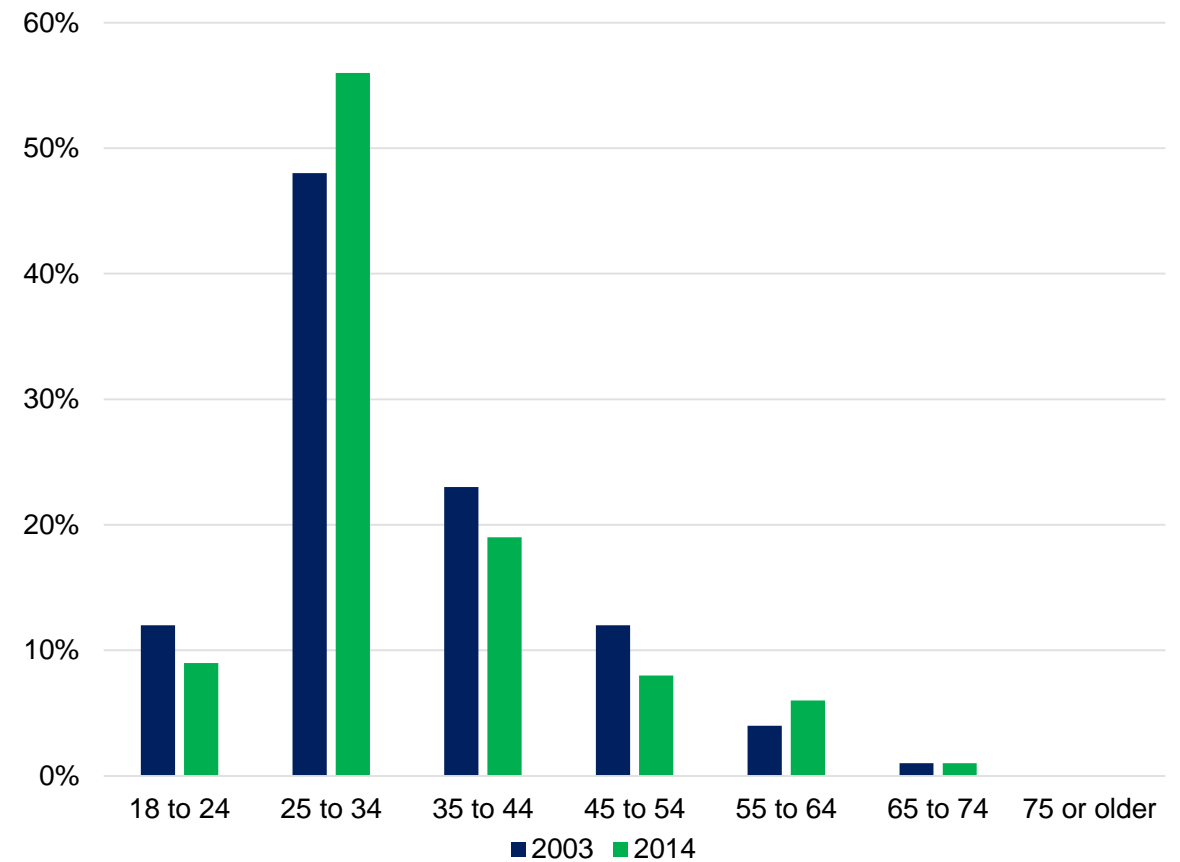
Repeat Buyers Distribution by Age

2003 Median Age= 46    2014 Median Age = 53



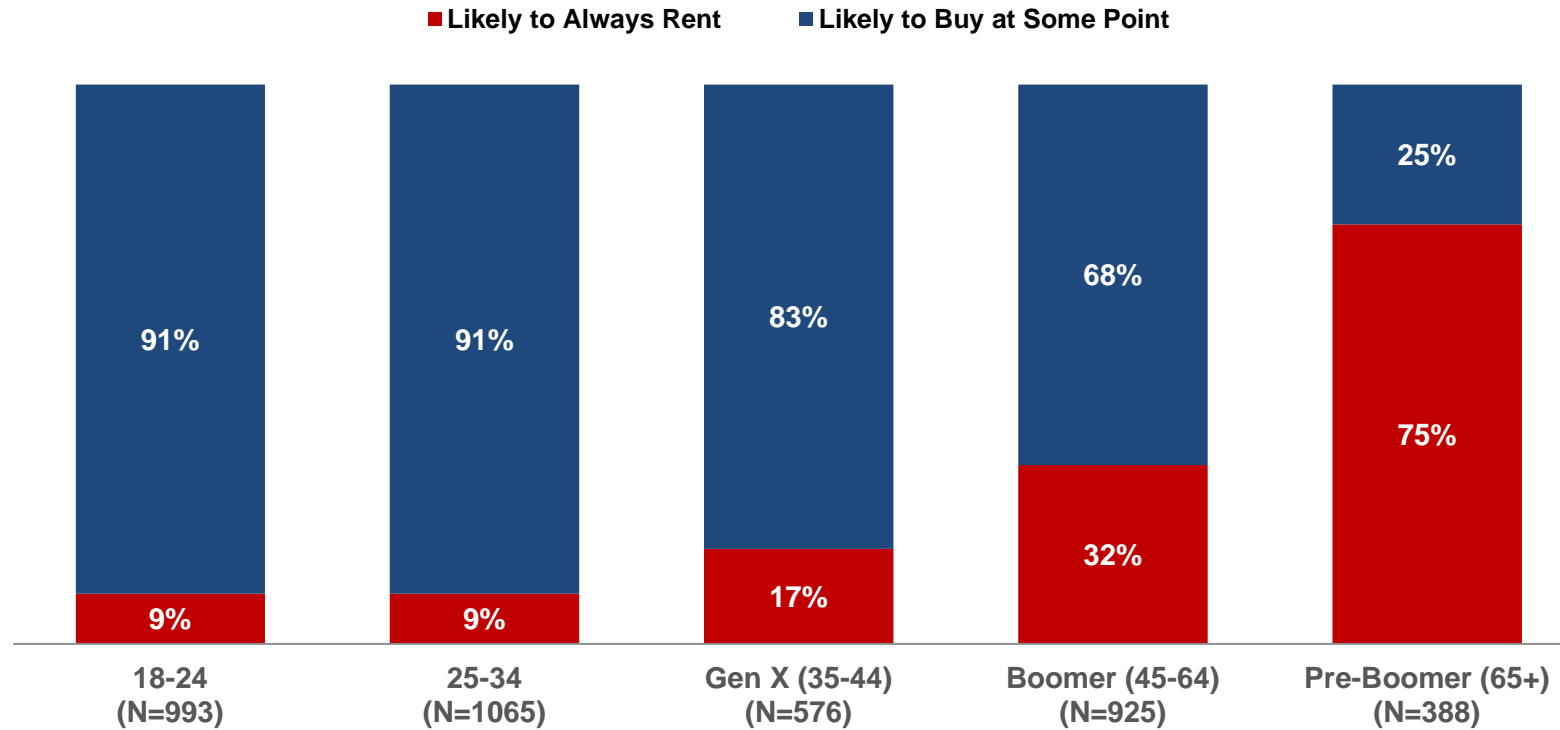
First-Time Homebuyers Distribution by Age

2003 Median Age= 32    2014 Median Age = 31



# The Vast Majority of Renters Age 18-44 Indicate They Do Plan to Buy at Some Point in the Future

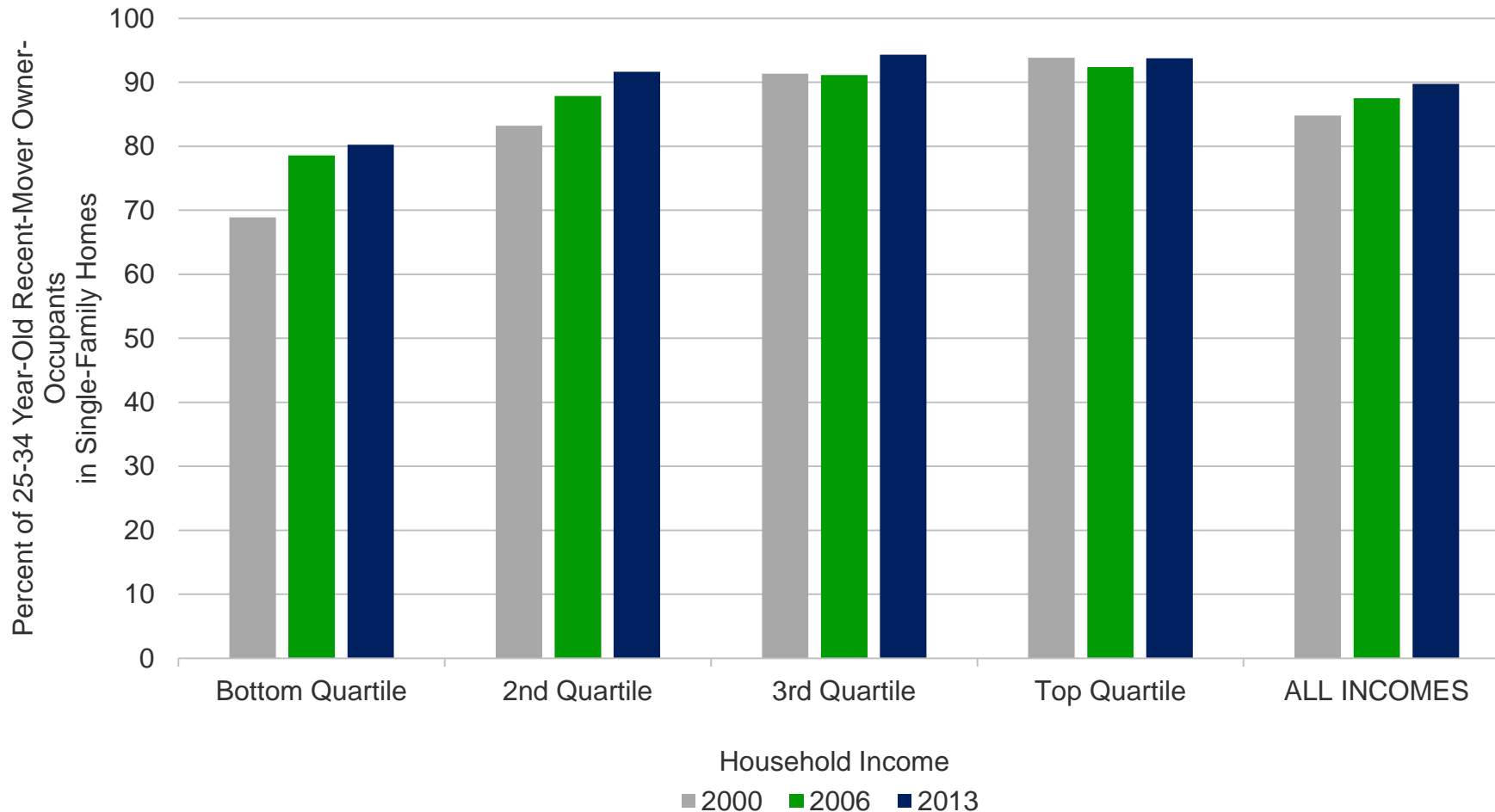
Lifetime Intentions to Own a Home Among Renters  
Q3 2014 to Q2 2015



Q31 – If you were going to move, would you be more likely to: Rent / Buy  
 Q50 – (IF Q31=RENT) In the future, are you more likely to: Always rent / Buy at some point in the future  
 Likely to buy at some point: Q31= Buy or Q50 = Buy at some point in the future  
 Likely to always rent: Q50 = Always Rent



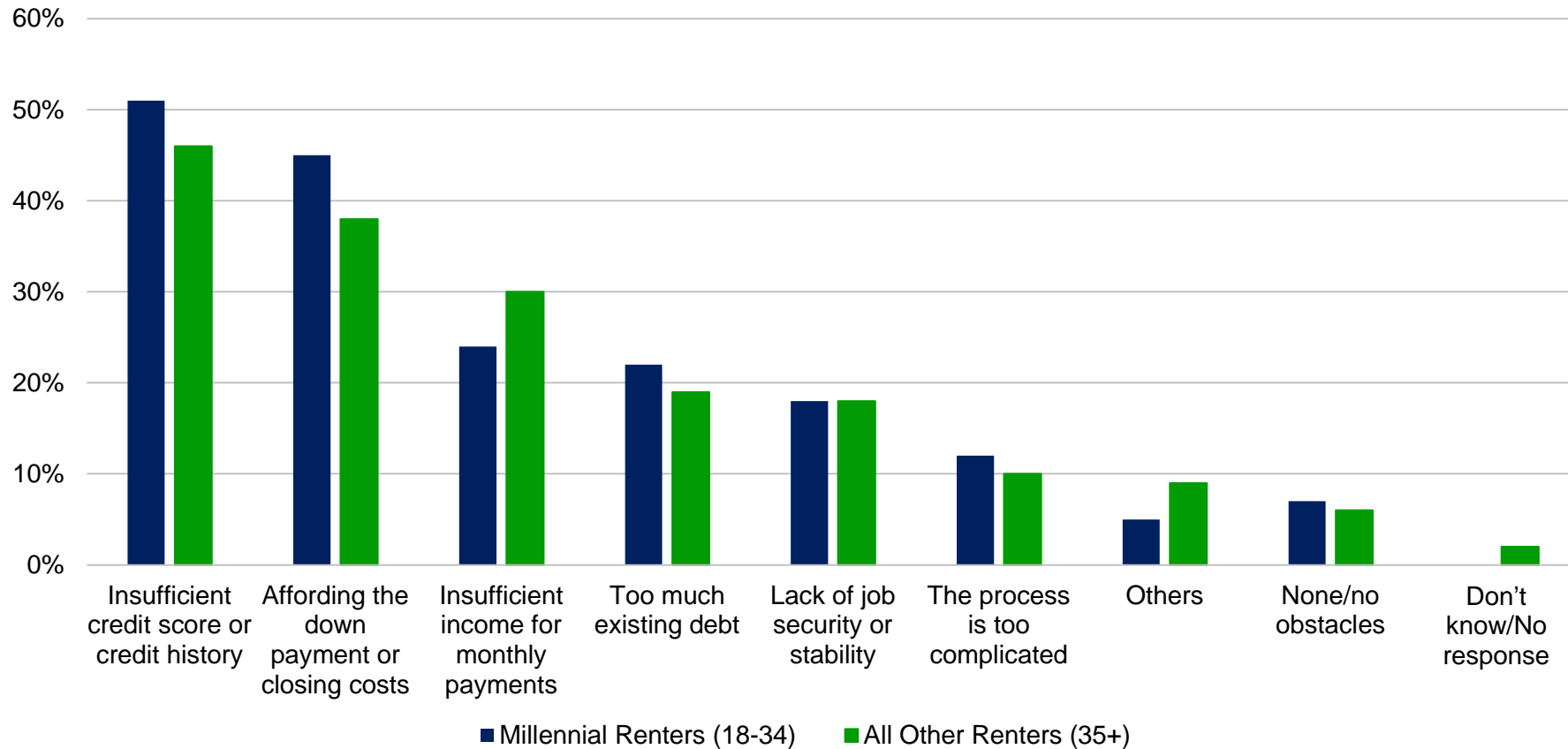
## Young Home Buyers of All Income Groups are Increasingly Purchasing Single-Family Homes



Quartile cutoffs were calculated using the income distribution of recent-mover owner-occupants aged 25-34 in 2006. Quartile membership in other years was determined by indexing the 2006 quartile cutoffs for inflation using the CPI-U-RS.

# Credit Profile and Up-Front Costs of Buying are Perceived as Big Obstacles to Qualifying for a Mortgage

Percent Reporting Item as Biggest Obstacle to Getting a Mortgage



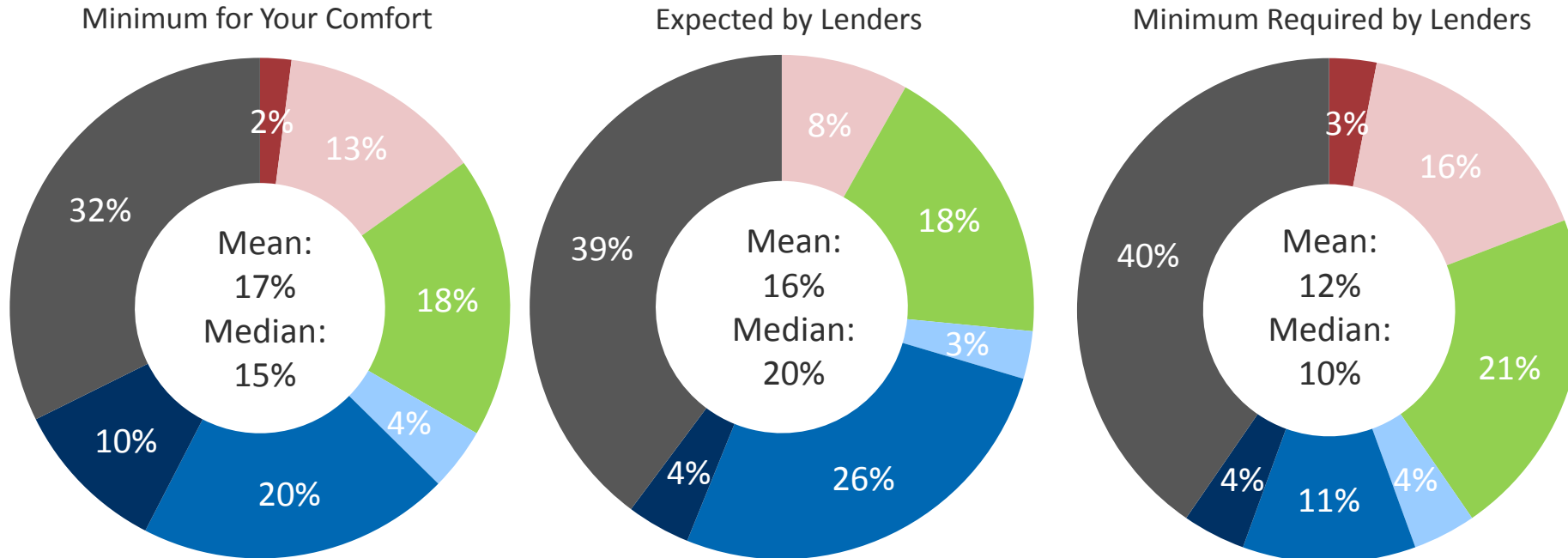
"What would be your biggest obstacle to getting a mortgage to purchase or refinance a home today?" Sum of responses exceeds 100 percent because respondents were allowed to select up to three obstacles. Data from November 2013 to October 2014 Fannie Mae National Housing Surveys.

# Mortgage Rates Dip Even Lower



# Down Payment – Consumer Preferences, Lender Expectations, and Requirements

Roughly four in 10 respondents are uncertain what down payment lenders either expect or require. When consumers consider a down payment, the threshold they set for themselves is, on average, more stringent than what they believe lenders both expect and require.



Overall, less-educated and lower-income consumers, African-Americans, Hispanics, and current renters are more likely to say “Don’t Know” across these down payment questions.



Base: Total sample, N=3,868

Q31. Imagine that you are planning to purchase a new home. What is the minimum percentage of the home’s sale price or appraised value that you would feel comfortable paying as a down payment in order to proceed with applying for a mortgage loan?

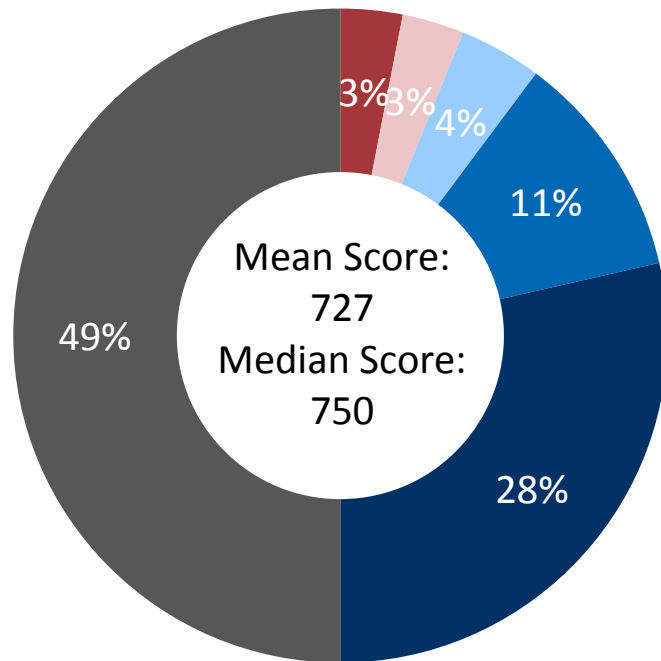
Q32. Based on what you have heard, what is the percentage of a home’s sale price or appraised value that lenders expect borrowers pay as a down payment for a typical mortgage today?

Q33. Regardless of what lenders expect, what do you think is the minimum down payment that lenders actually require?

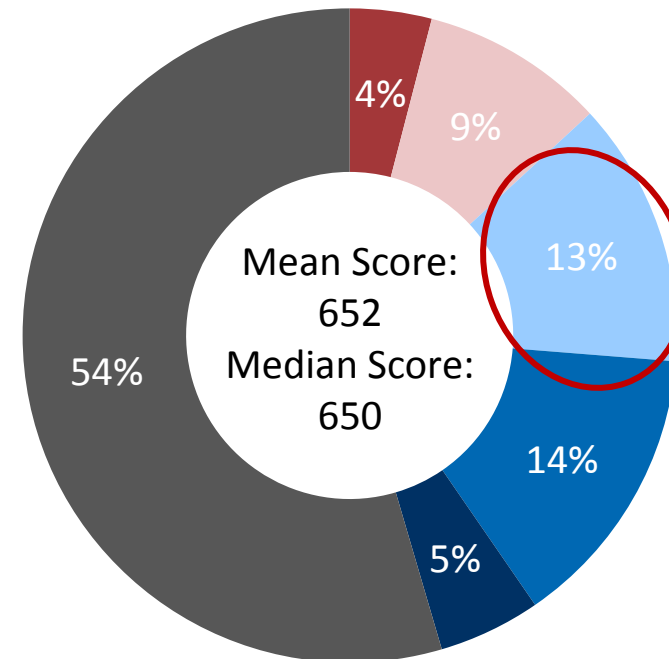
## Credit Score

Roughly half of respondents do not know what their credit score is or volunteer a number outside of the score range. The mean score consumers posit as the minimum credit score required is 652, higher than Fannie Mae’s requirement of 620. Only 13 percent pick the “620 - 679” choice bucket.

Consumers’ Self-Reported Credit Score



Minimum Credit Score Lenders Require



740-850

680-739

620-679

550-619

300-549

Don't Know/Outside Range

Base: Total sample, N=3,868

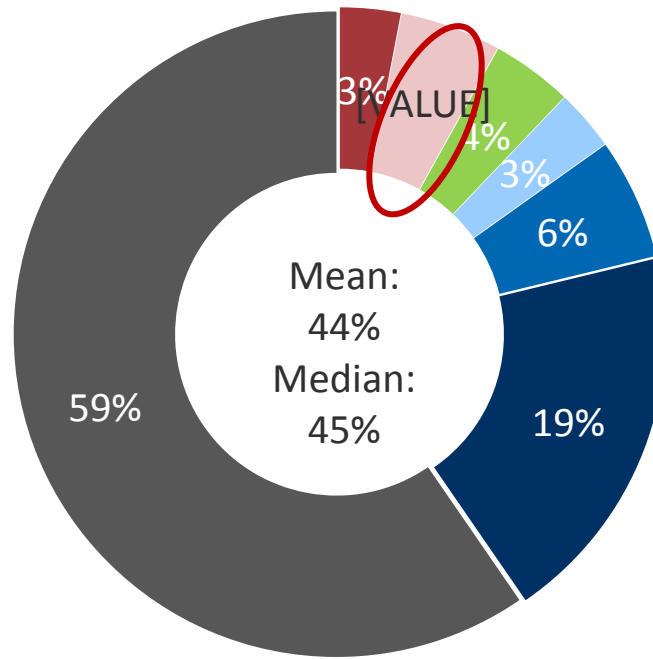
Q30. To the best of your knowledge, what do you think your FICO® score is?

Q29. In order for borrowers to get a mortgage today, what do you think is the minimum FICO® score lenders would require?

## Perceived Maximum Back-End Debt-to-Income (DTI) Ratio

Nearly 60 percent of respondents do not know the maximum back-end DTI ratio that lenders use. Only 5 percent pick the “40% - 49%” choice bucket. Younger, less-educated, and lower-income consumers and Hispanics are more likely to provide a lower DTI estimate.

**Total Debt Payments as a % of Monthly Income  
(Maximum Back-End DTI)**



Base: Total sample, N=3868  
Q35. And what is the percentage of a borrower’s household monthly income that lenders do not want borrowers to exceed when paying the total amount of a borrower’s recurring monthly debt payments, including expected housing costs such as mortgage, homeowner’s insurance and property tax; and other payments such as credit cards and auto loan?

Note: Green shading indicates subgroup is significantly higher than total; red shading indicates subgroup is significantly lower than total

## 2016 Housing Outlook – Up from 2015, but Slower Growth

	February 2016 forecast
Housing Starts	Up 11.1% to 1.234 million
New Single-Family Home Sales (% Change Year-over-Year)	Up 11.3% to 558 thousand
Total Existing Home Sales (Single-Family, Condos, and Co-Ops)	Up 2.7% to 5.402 million
FHFA Purchase-Only Index (Annual Percent Change Q4/Q4)	Up 5.2%
Purchase Mortgage Originations	\$950 billion
Refinance Mortgage Originations	\$558 billion
30-Year Fixed Rate Mortgage (Year-end)	3.8%

## Appendix

**House Price Declines May Be In Store for Some Oil-Producing States: A Repeat of the 1980s?**

<http://fanniemae.com/portal/about-us/media/commentary/082815-brescia.html>

**Baby Boomers Are Not Leaving Their Single-Family Homes for Apartments**

<http://fanniemae.com/portal/research-and-analysis/housing-insight-082015.html>

**Rent or Own, Young Adults Still Prefer Single-Family Homes**

<http://fanniemae.com/portal/research-and-analysis/housing-insight-070115.html>

**The Return of Private Capital**

<http://fanniemae.com/portal/research-and-analysis/housing-insight-100414.html>

**Young-Adult Housing Demand Continues to Slide, But Young Homeowners Experience Vastly Improved Affordability**

<http://fanniemae.com/portal/research-and-analysis/housing-insight-093014.html>

**Link to all archived Fannie Mae Economic & Strategic Research Housing Insights**

<http://fanniemae.com/portal/research-and-analysis/housing-insights-archive.html>



## Speaker Biography

### Mark Palim – Vice President of Applied Economic & Housing Research

Dr. Mark Palim is Vice President of Applied Economic and Housing Research at Fannie Mae. He is responsible for overseeing the Economic and Strategic Research Group's forecasting functions and manages multi-disciplinary partnerships across the company to address specific business issues facing Fannie Mae. Dr. Palim is a key spokesperson on economic trends and a frequent speaker at national mortgage finance and housing industry events.

Prior to working at Fannie Mae, Dr. Palim was an economic consultant at PricewaterhouseCoopers and LECG. His practice focused on applying economic and financial theory to a variety of business disputes and policy questions. He worked as a consulting and testifying expert in antitrust cases and disputes in the financial services industry. In addition, Dr. Palim led a team of 75 adjudicators charged with valuing claims for the Department of Justice and the Special Master administering the Federal September 11th Victim Compensation Fund.



Dr. Palim was first involved with economic forecasting and mortgage securities in 1988 when he was a portfolio manager and reported to the Chief Economist at Mercantile Safe Deposit and Trust Company. Subsequently, he continued his work on macroeconomic and policy issues as a staff economist for the National Association of Federal Credit Unions (NAFCU).

Dr. Palim has a Ph.D. in economics from George Mason University and a B.A. in international studies from the Johns Hopkins University. In addition to his academic training, Dr. Palim is a Chartered Financial Analyst charter holder (CFA).

Dr. Palim is married to an attorney and has four children. He lives in Bethesda, Maryland and grew up in Brussels, Belgium. Dr. Palim is fluent in French.

## **Contact Information**

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