

Challenges and opportunities for housing & mortgage markets

U.S. Housing and Mortgage Market Outlook

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A *Better* Freddie Mac

...and a *better* housing finance system

For families

...innovating to improve the liquidity, stability and affordability of mortgage markets

For customers

...competing to earn their business

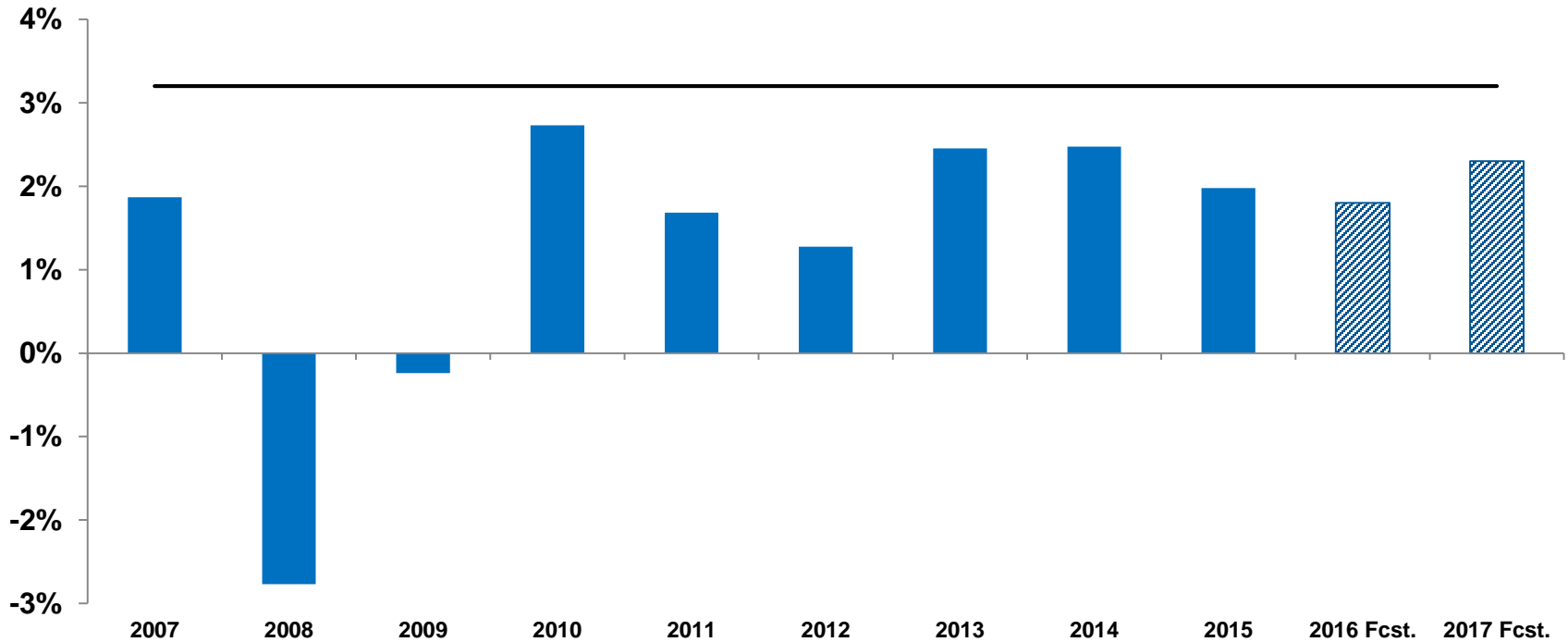
For taxpayers

...reducing their exposure to mortgage risks

- **Macro trends:** Weak economic growth, *but* growth
- **Interest rates:** Is there a bottom?
- **Housing market:** The bright spot in the U.S. economy
- **House prices:** Rapid increases, but no bubble
- **Mortgages:** Falling mortgage rates delay origination decline

- **Weak growth, *but* growth rather than recession**
- **Low unemployment rate masks underlying weakness**
- **Fed in a quandary**

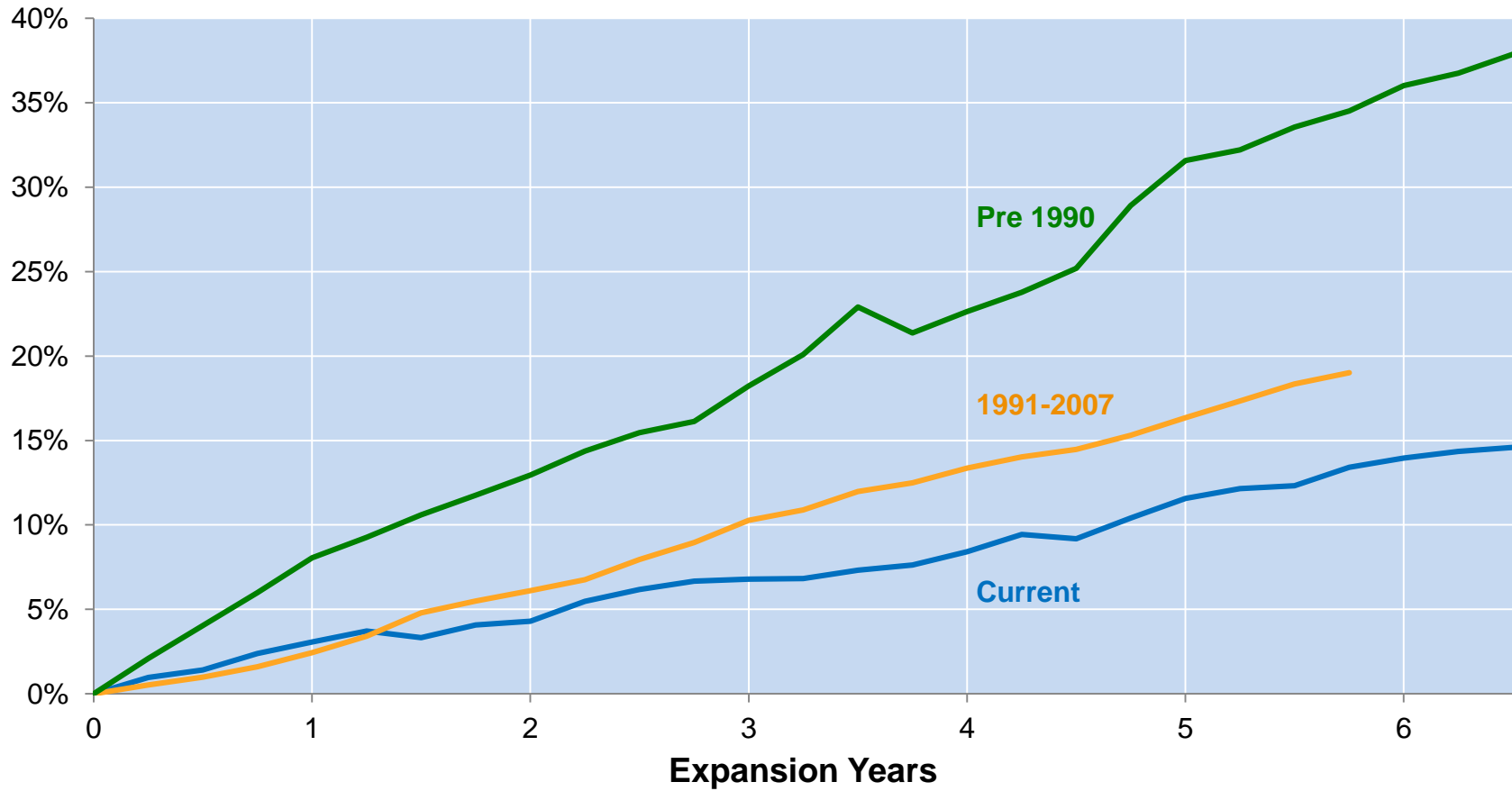
Real Gross Domestic Product (Annual Percentage Change, Q4/Q4)



Source: Bureau of Economic Analysis, Freddie Mac.

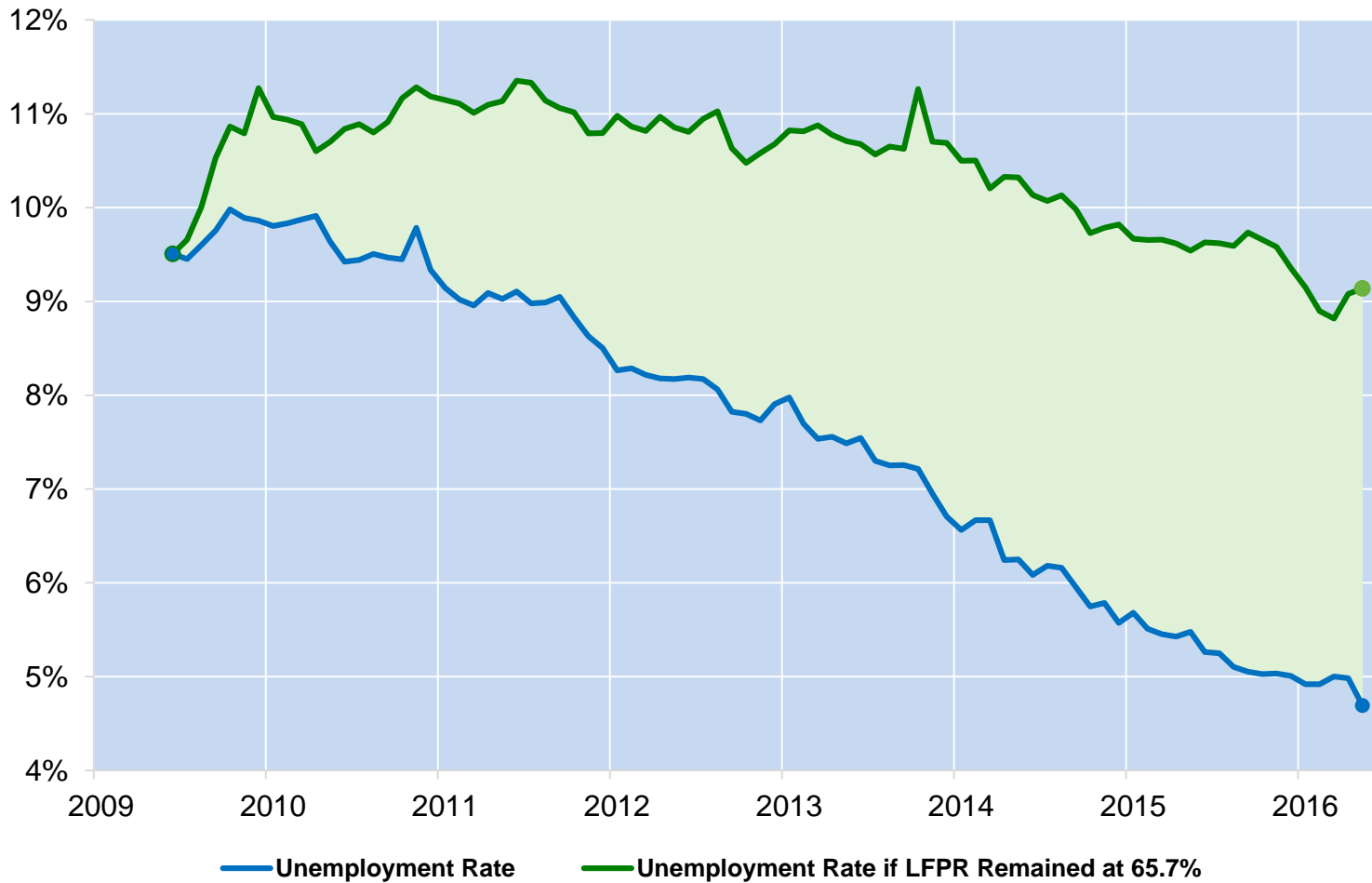
The weakest expansion since 1946

Cumulative GDP Growth: Postwar Expansions



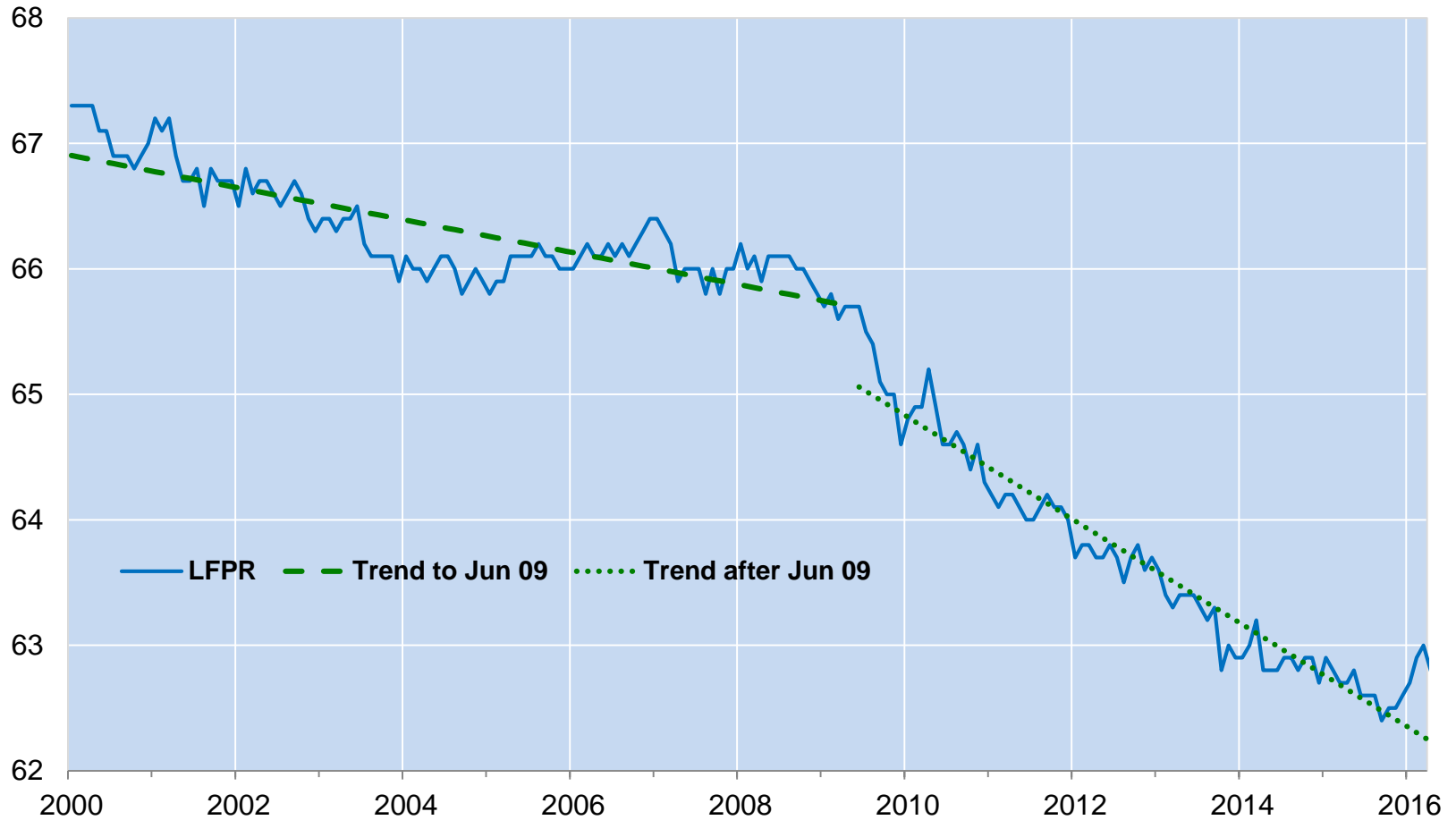
Lower labor force participation accounts for the “improvement” in the unemployment rate

Unemployment Rate



The decline in labor force participation has accelerated

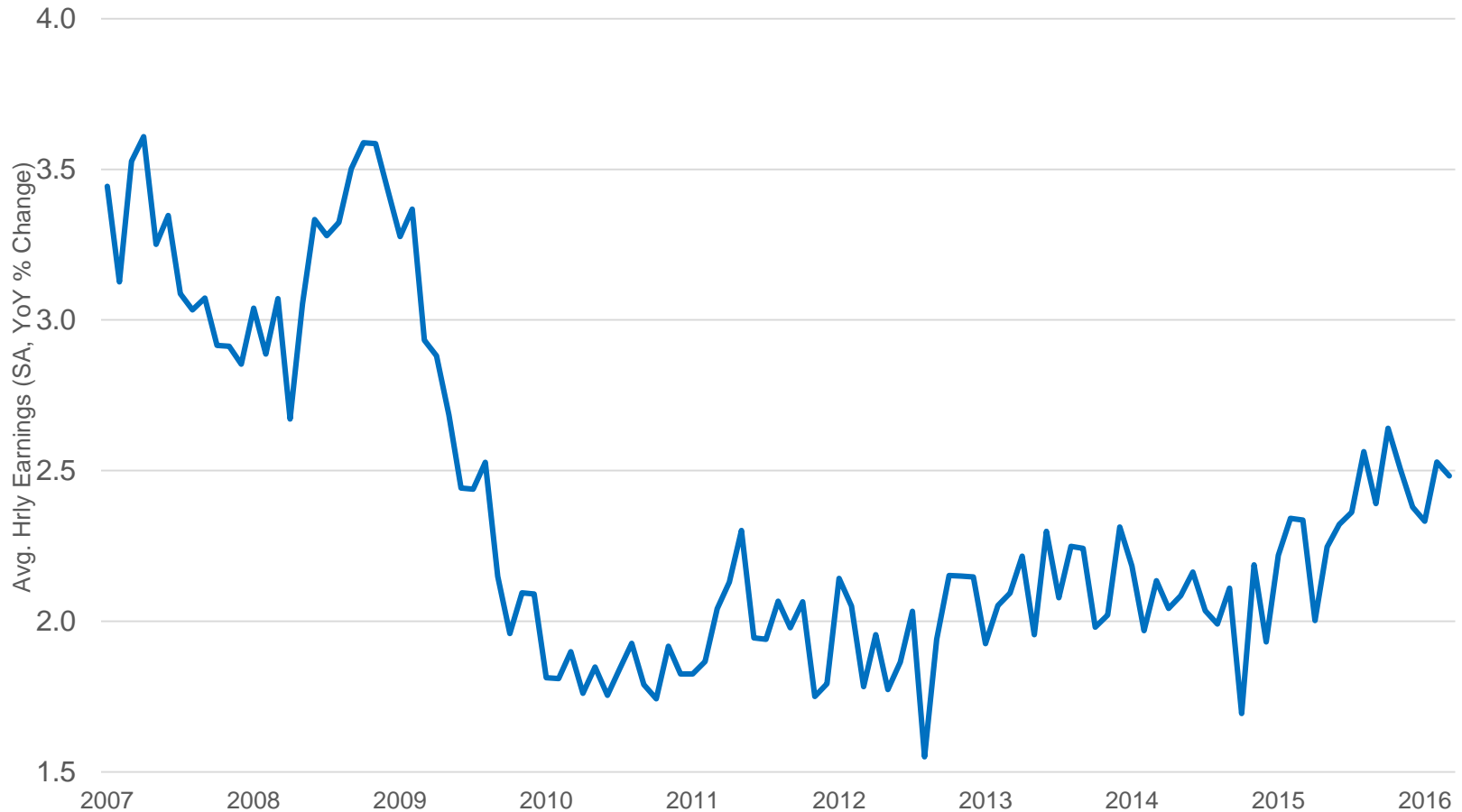
Labor force participation (%)



Source: BLS

Wage growth remains weak

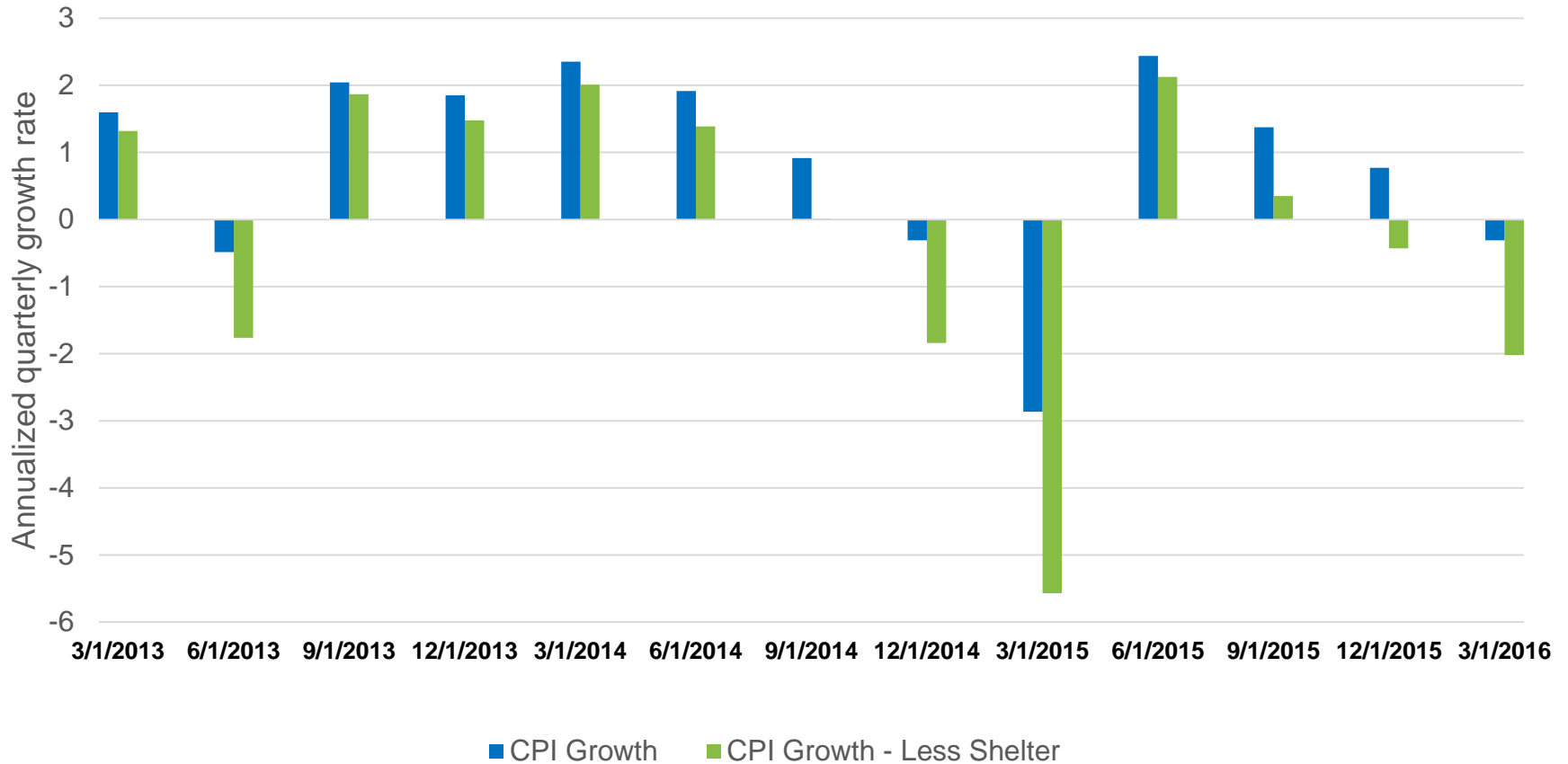
Hourly Earnings Growth



Source: BLS

Source: Federal Reserve Bank of Atlanta

House price growth is driving inflation



Source: Bureau of Labor Statistics

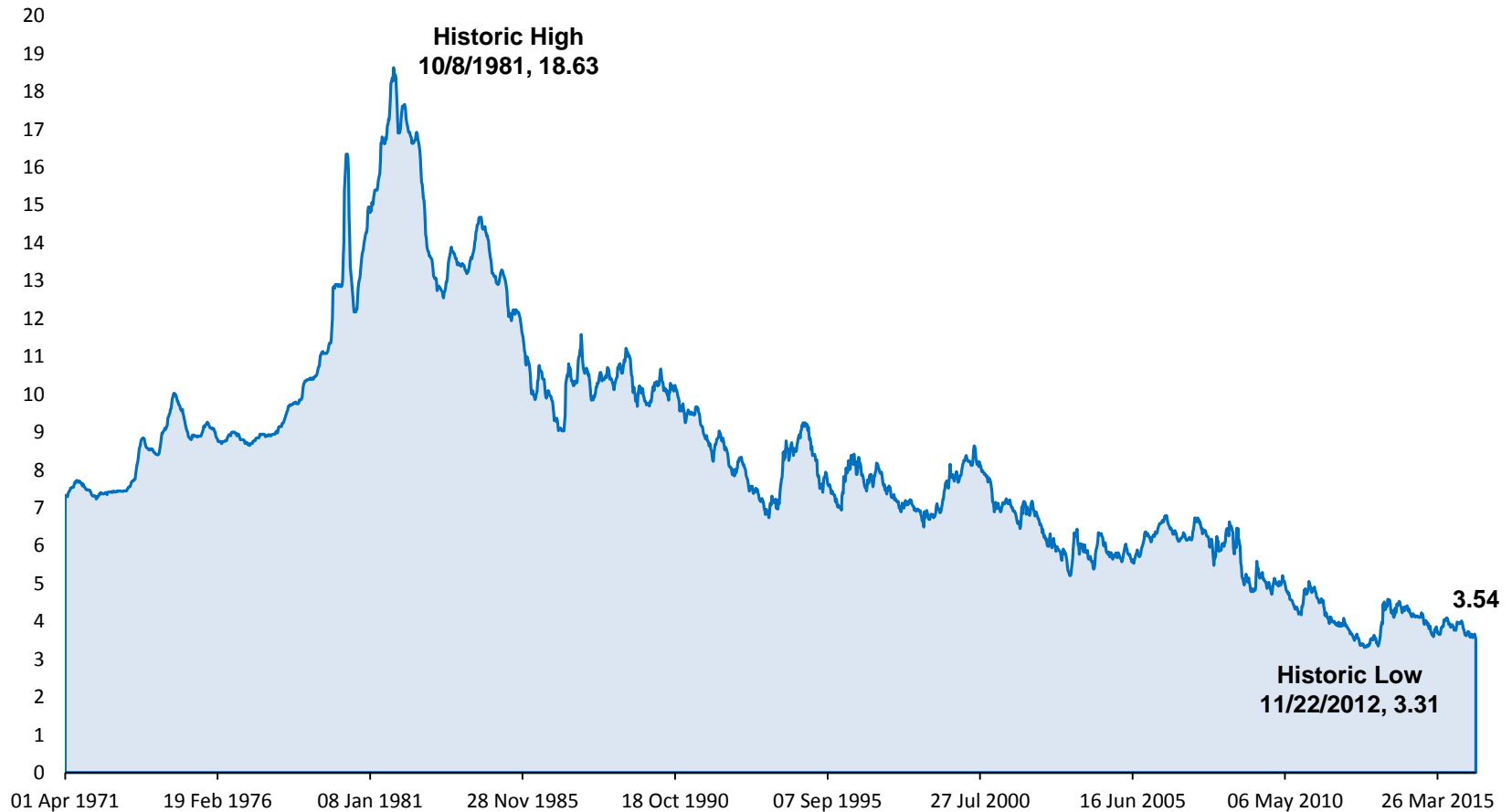
- **Mortgage rates on a 35-year rally**
- **Loose connection between Fed funds rate and mortgage rate**
- **Fed holdings of MBS sustain low mortgage rates**

Mortgage rates remain near historic lows

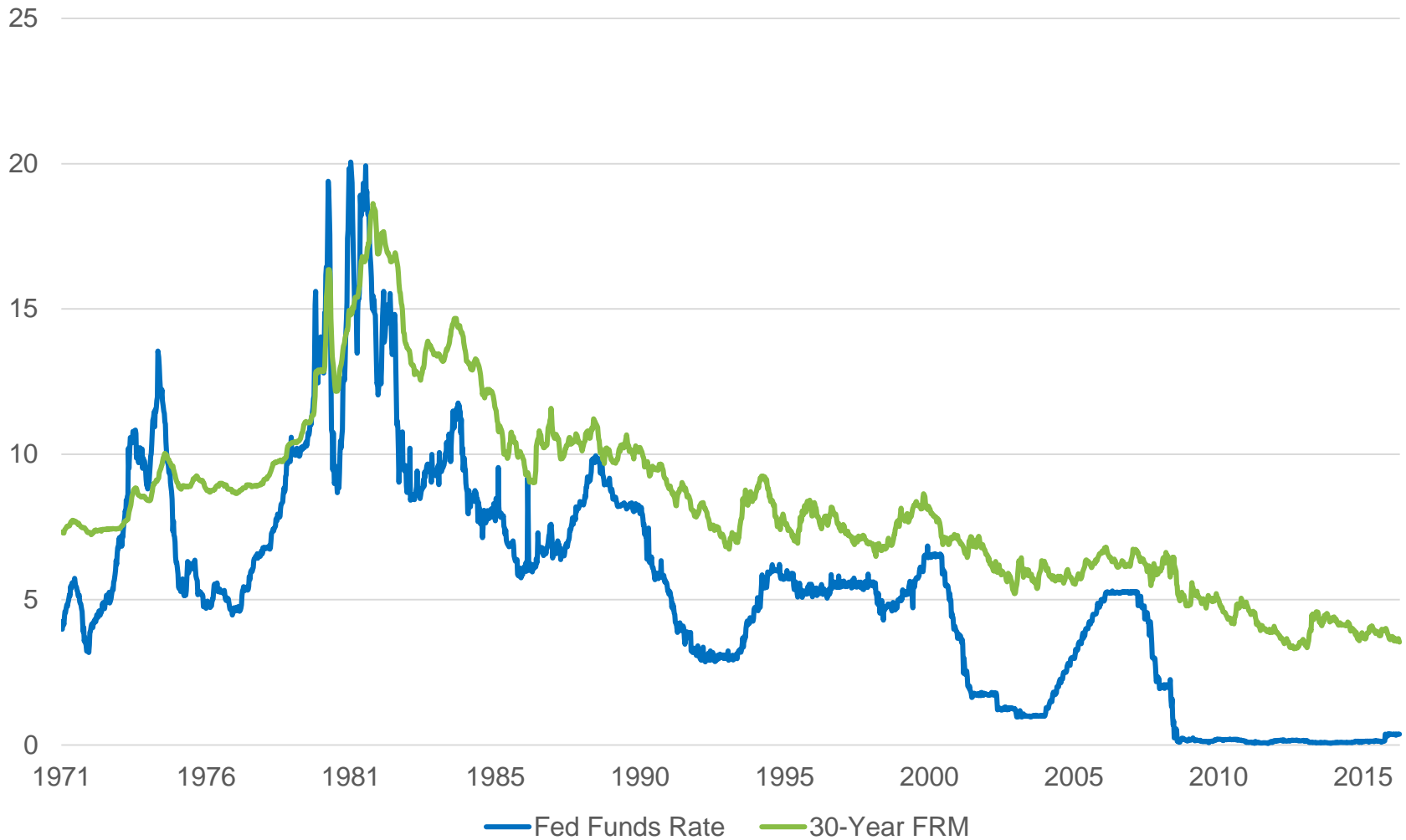


Freddie Mac Primary Mortgage Market Survey®

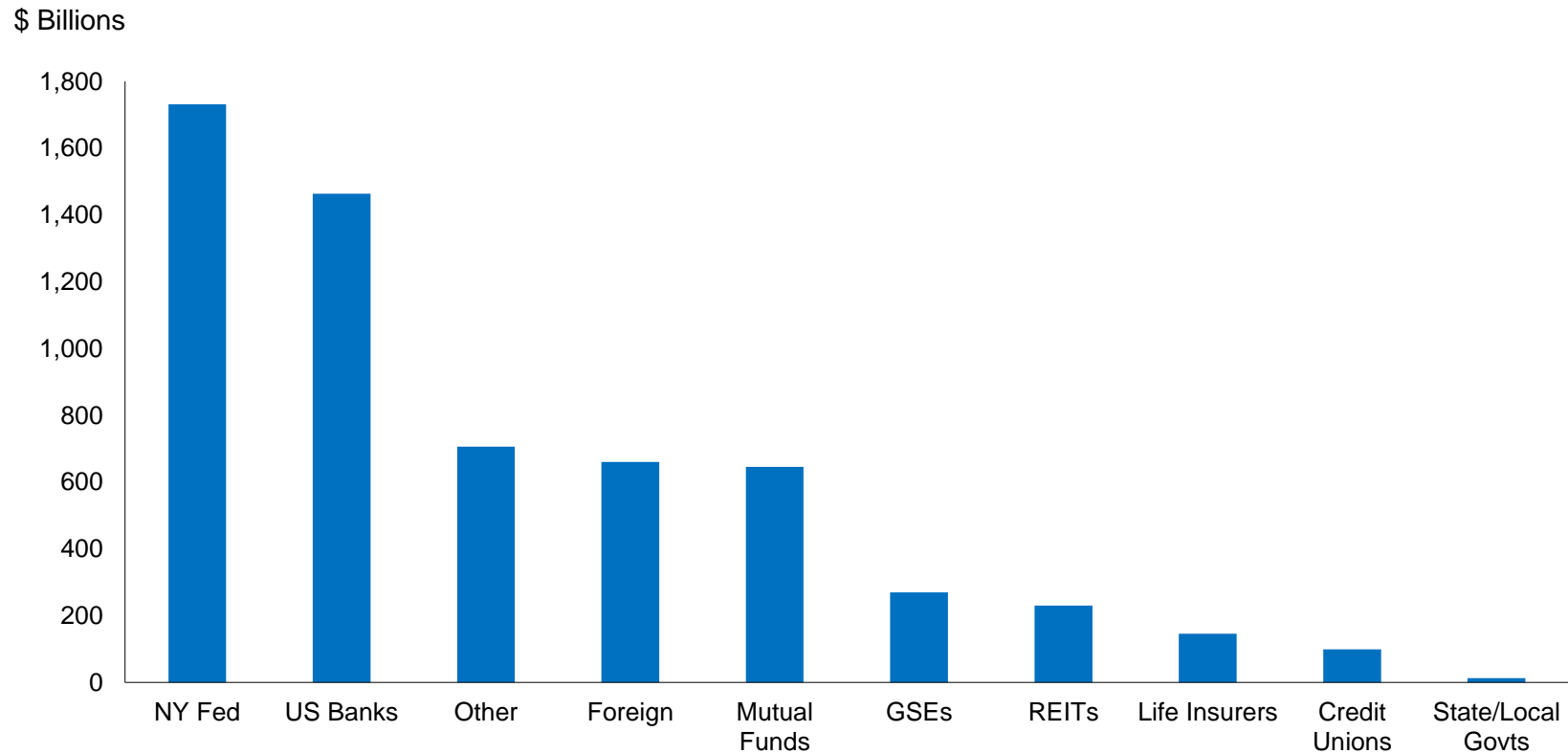
30-year FRM (%), U.S. Weekly Average through 6/16/2016



Fed Funds vs. 30-year mortgage rate



Estimated institutional holdings of Agency MBS



Note: Other investors include hedge funds, structured investment vehicles, pension funds, savings institutions, nonprofits and individuals. Agency MBS includes Freddie Mac, Fannie Mae and Ginnie Mae securities.

Source: Freddie Mac, Fannie Mae, Federal Reserve, Inside MBS & ABS, National Credit Union Administration and the U.S. Treasury Department.

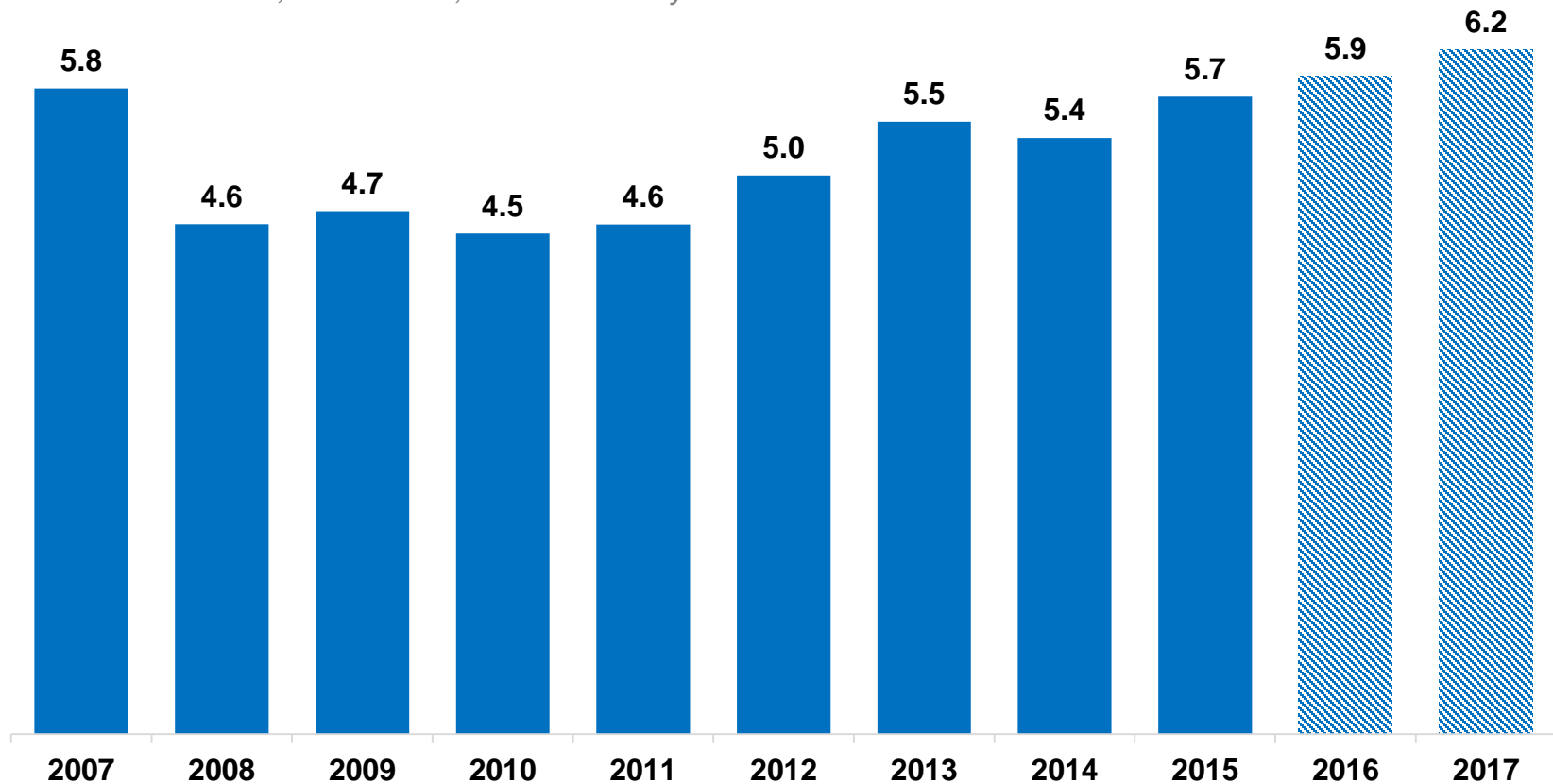
Data as of December 31, 2015.

- **Strong, but unbalanced, growth**
- **Limited inventory of houses for sale**
- **House prices passing previous peaks—what lies ahead?**

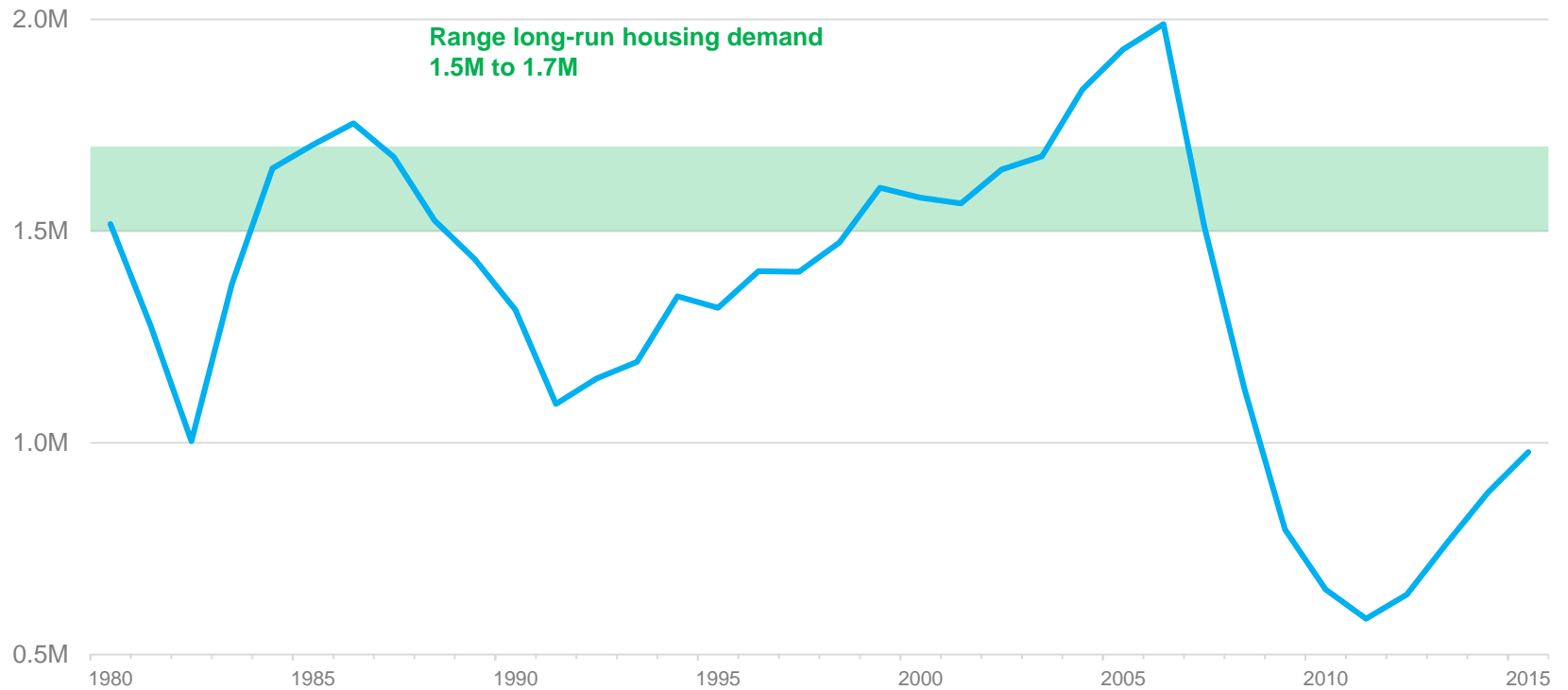
The Best Year in Total Home Sales Since 2007

Total Home Sales, Millions (New + Existing)

Source: NAR, Census/HUD, Freddie Mac May 2016 Outlook

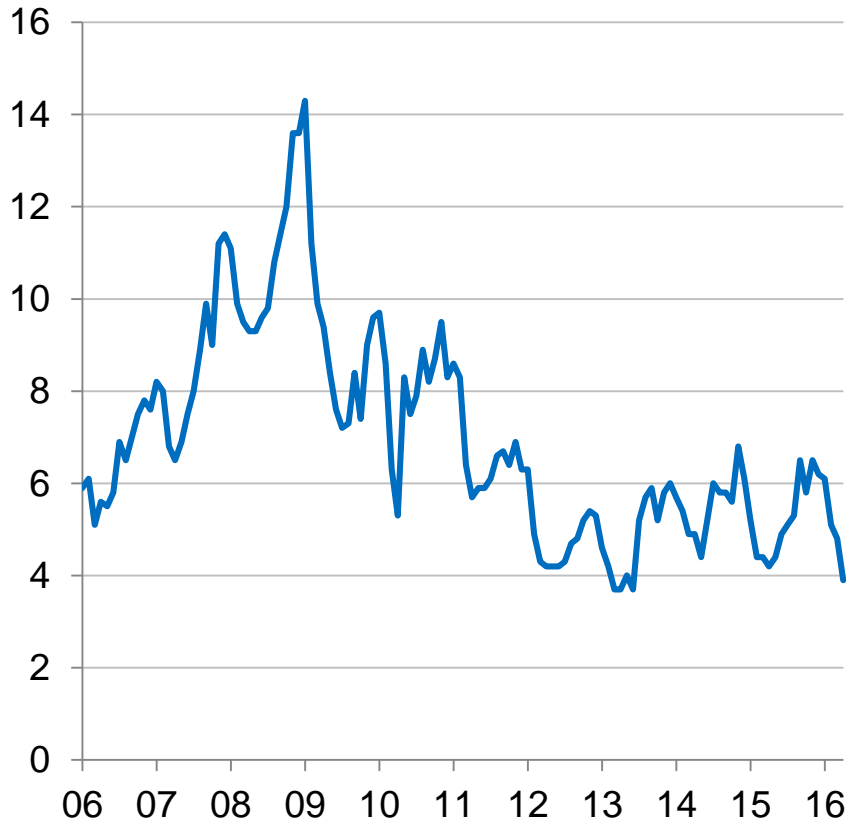


Total housing completions

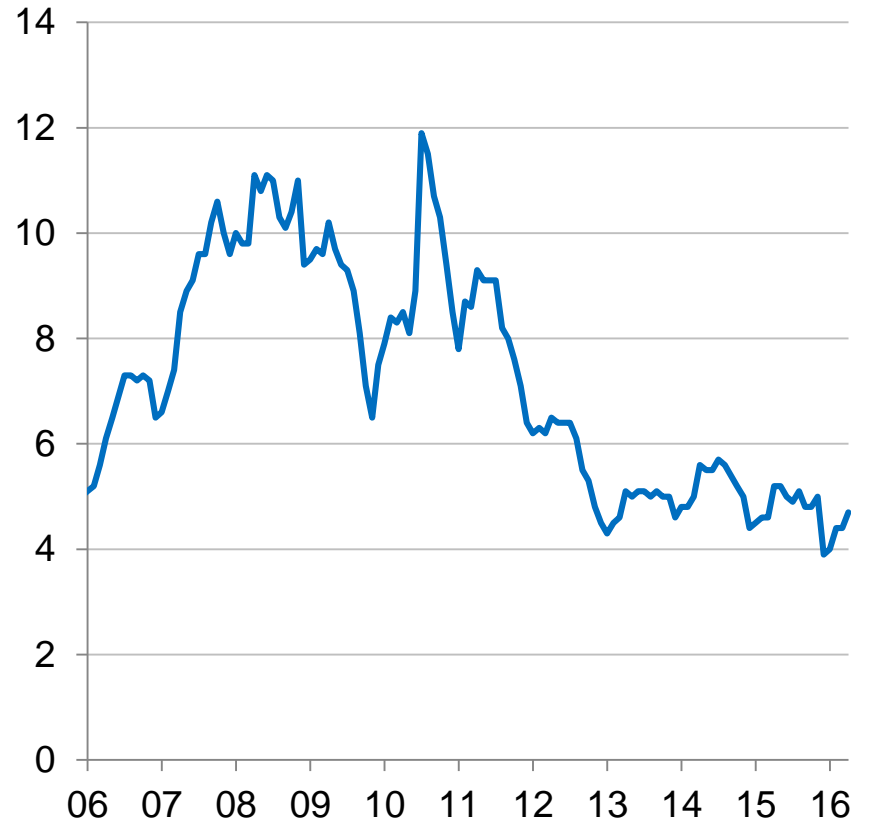


Number of Months Inventory

New Homes



Existing Homes

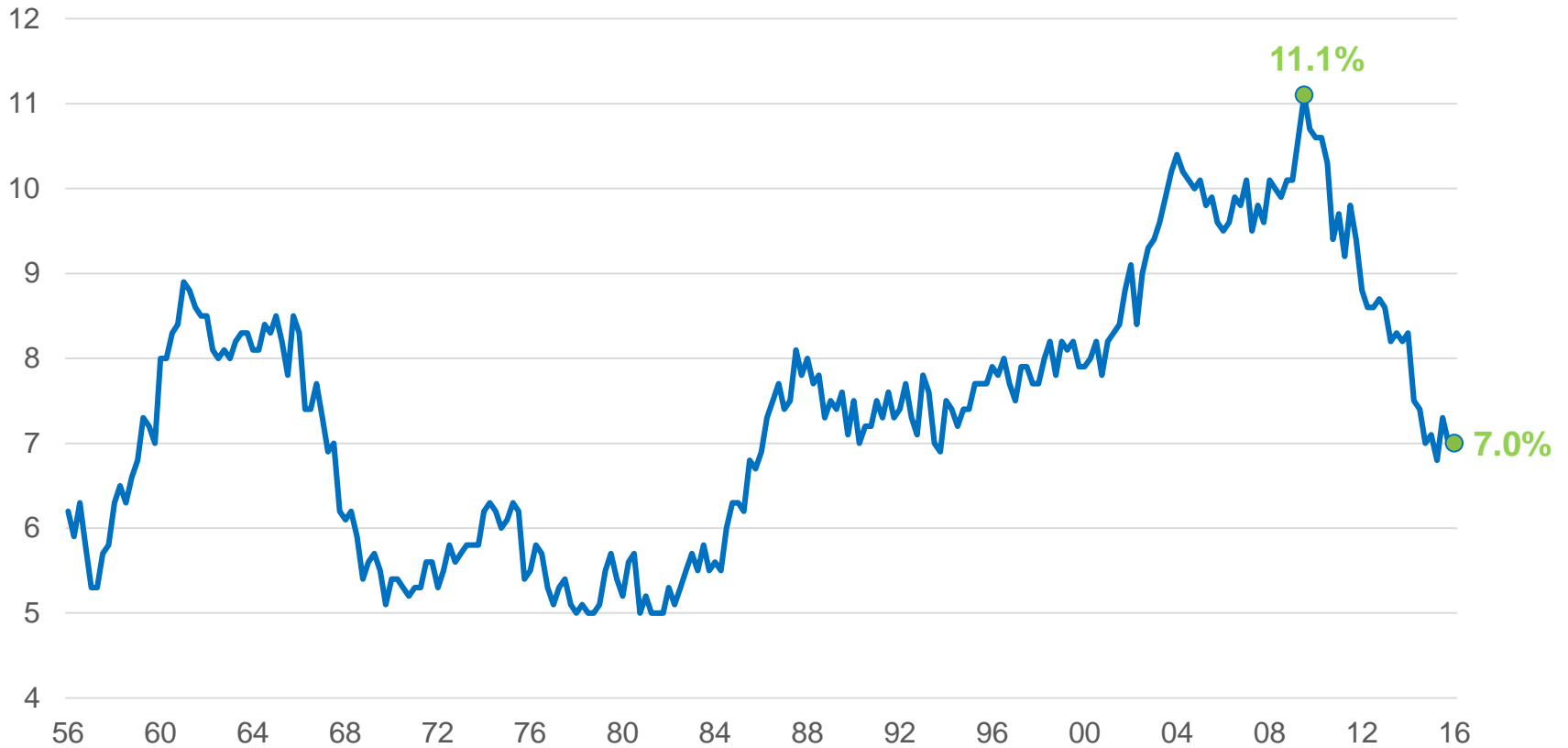


Six months of inventory balances supply & demand

The rental market is equally tight

Rental Vacancy Rate (% , NSA)

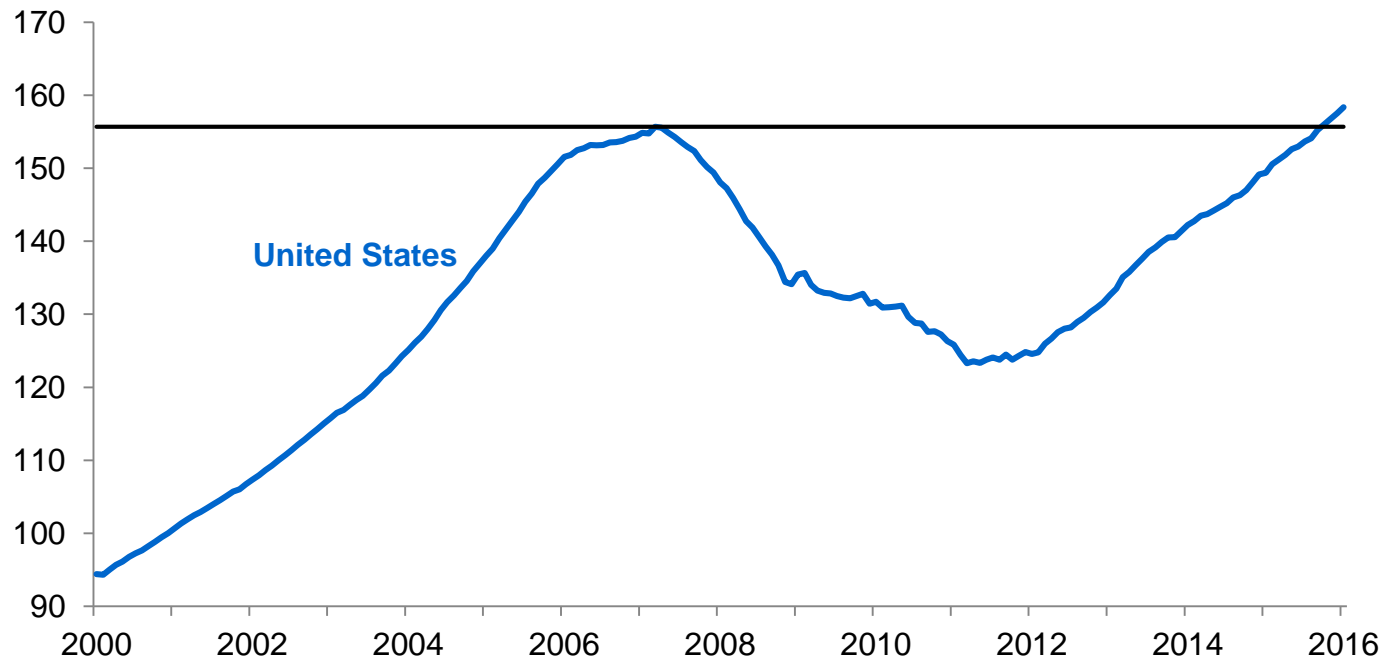
Source: Current Population Survey/Housing Vacancy Survey



- **Shortage of supply => rapid house price appreciation**
- **Price trends vary significantly across the US**
- **House prices passing previous peaks—what lies ahead?**

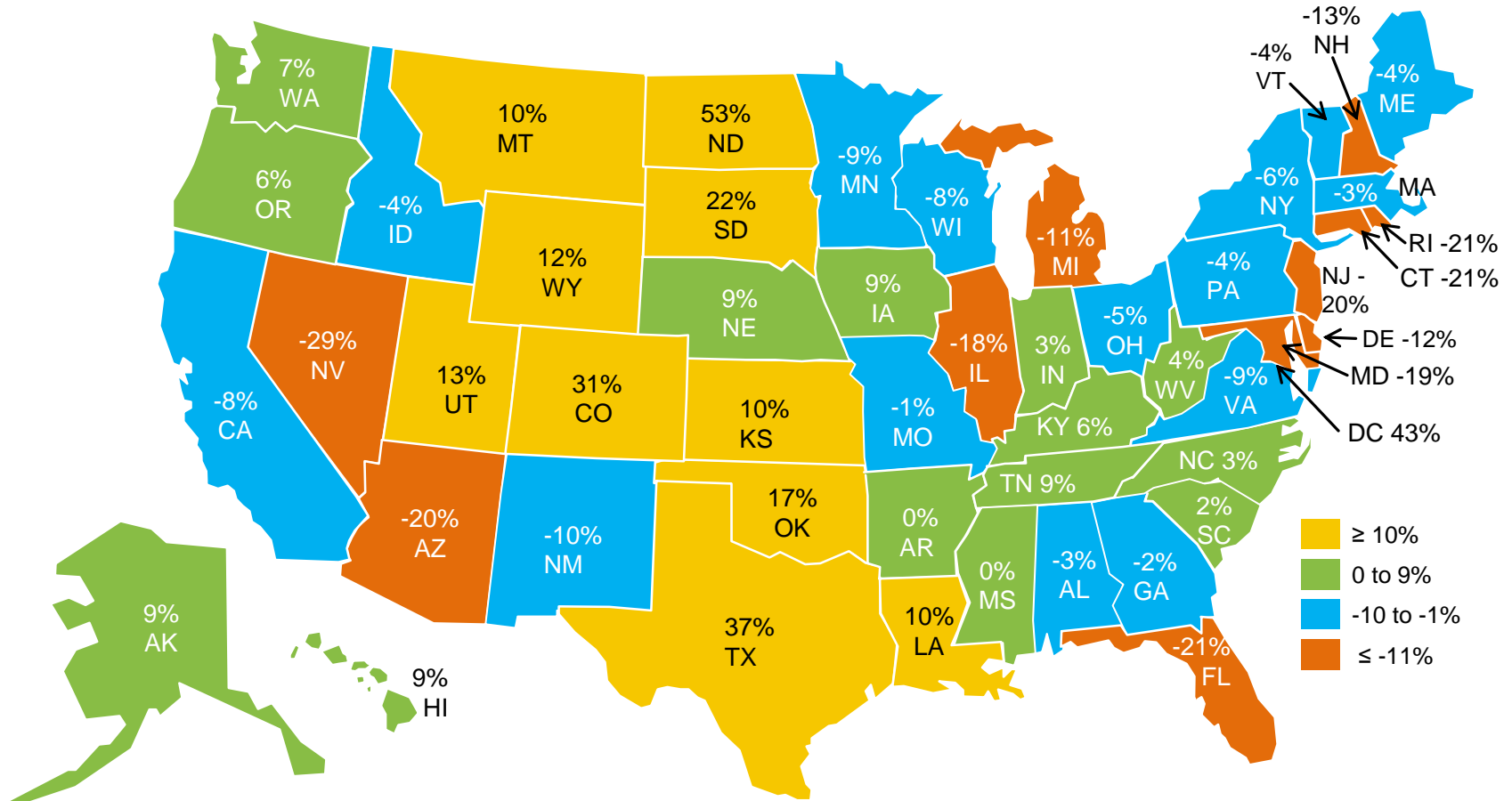
Tight supply is propping up prices

FHFA House Price Index (Dec 2000=100)



Source: FHFA, Purchase-only House Price Index (SA)

Home price performance by state Peak (June 2006) to Current (March 2016)¹



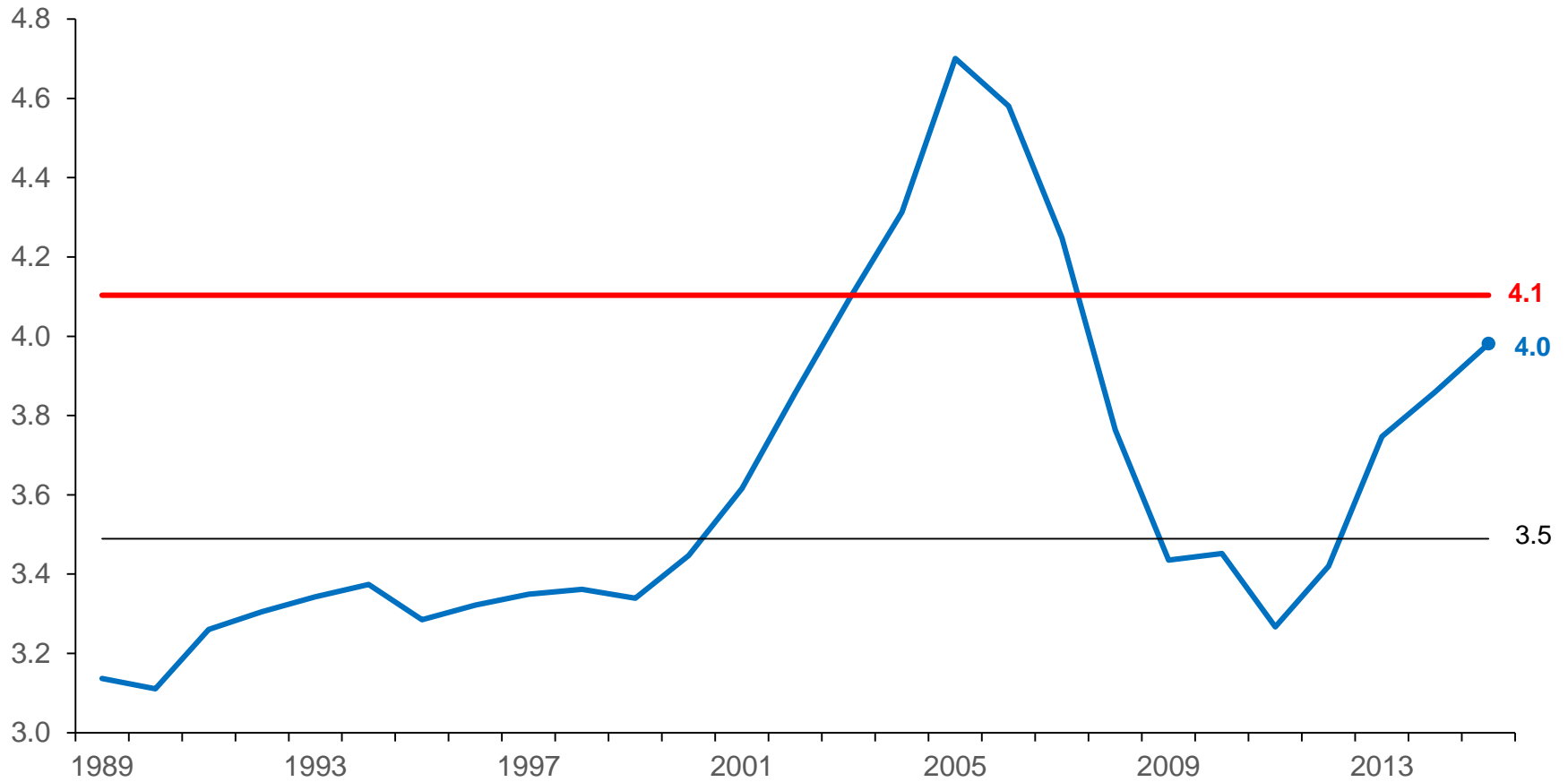
¹ The Freddie Mac House Price Index for the U.S. is a value-weighted average of the state indexes where the value weights are based on Freddie Mac's single-family credit guarantee portfolio. Other indices of home prices may have different results, as they are determined using different pools of mortgage loans and calculated under different conventions. The Freddie Mac House Price Index for the U.S. is a non-seasonally adjusted monthly series. Percent changes were rounded to nearest whole percentage point

Source: Freddie Mac

Significant Variability by Region & State Since the Peak

Are house prices getting too high?

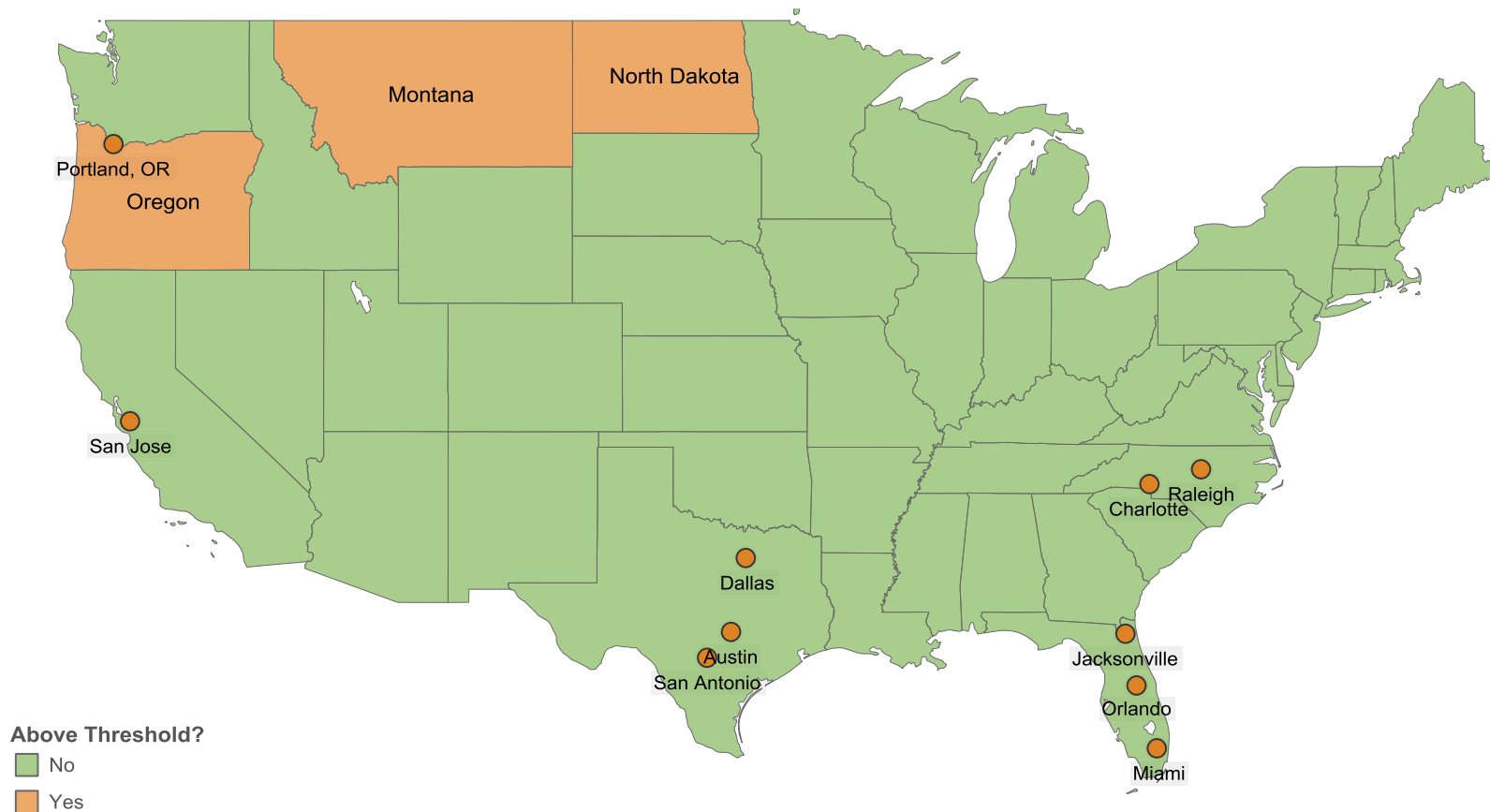
National house Price to Income ratio



Sources: NAR, Moody's Analytics

A possible watch list

Three states and 10 metro areas were above their PTI threshold in 4Q15



Note: Data compiled by Economic & Housing Research. Metro area median prices are Moody's Analytics seasonally adjusted median house values, based on NAR data. Metro area median incomes based on Moody's Analytics forecasts and interpolations of Census data. The historical range is quarterly data from 1993Q1-2003Q4.

Watch list clusters in three states and the West coast

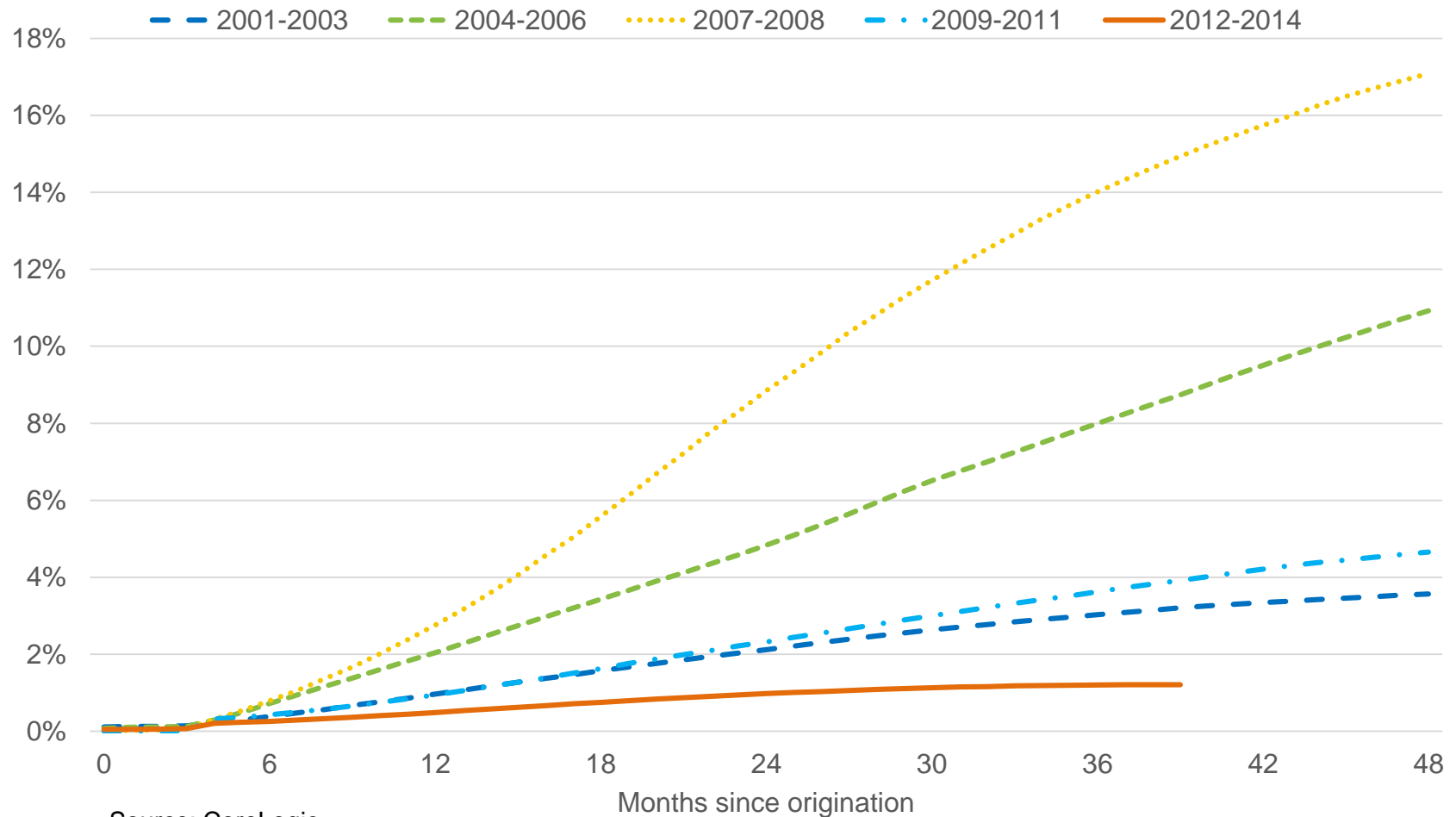
- ***Are there non-financial reasons for unusually-high price/income ratios?***
 - » High demand/constrained supply
 - » Increase in income inequality skews the PTI metrics

- ***Is credit quality deteriorating?***
 - » Credit scores of recent originations
 - » Indexes of mortgage fraud

- ***Is leverage increasing?***
 - » Re-emergence of “affordability” products
 - » LTV of recent originations
 - » Cash-out refinances; HELOC origination and utilization

Is credit quality deteriorating?

Cumulative default rate by vintage

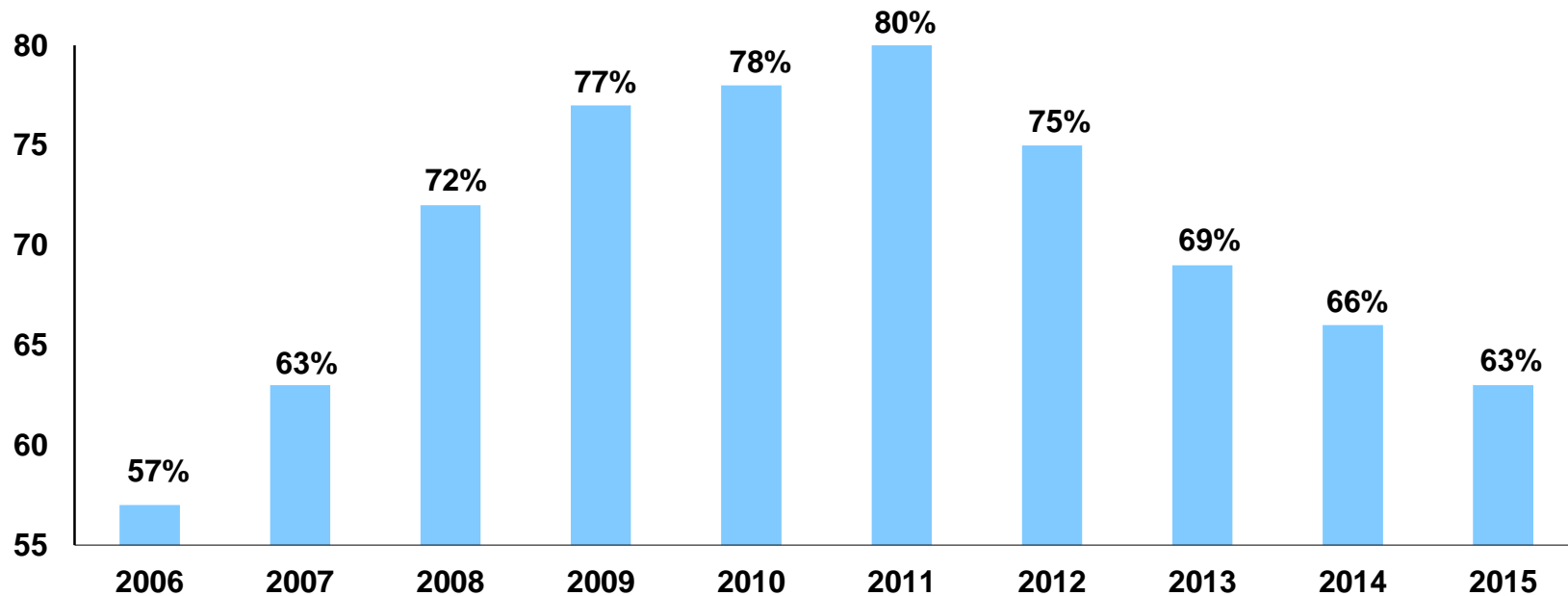


Source: CoreLogic

Current LTV of portfolio continues to improve reflecting HPA and tighter underwriting standards



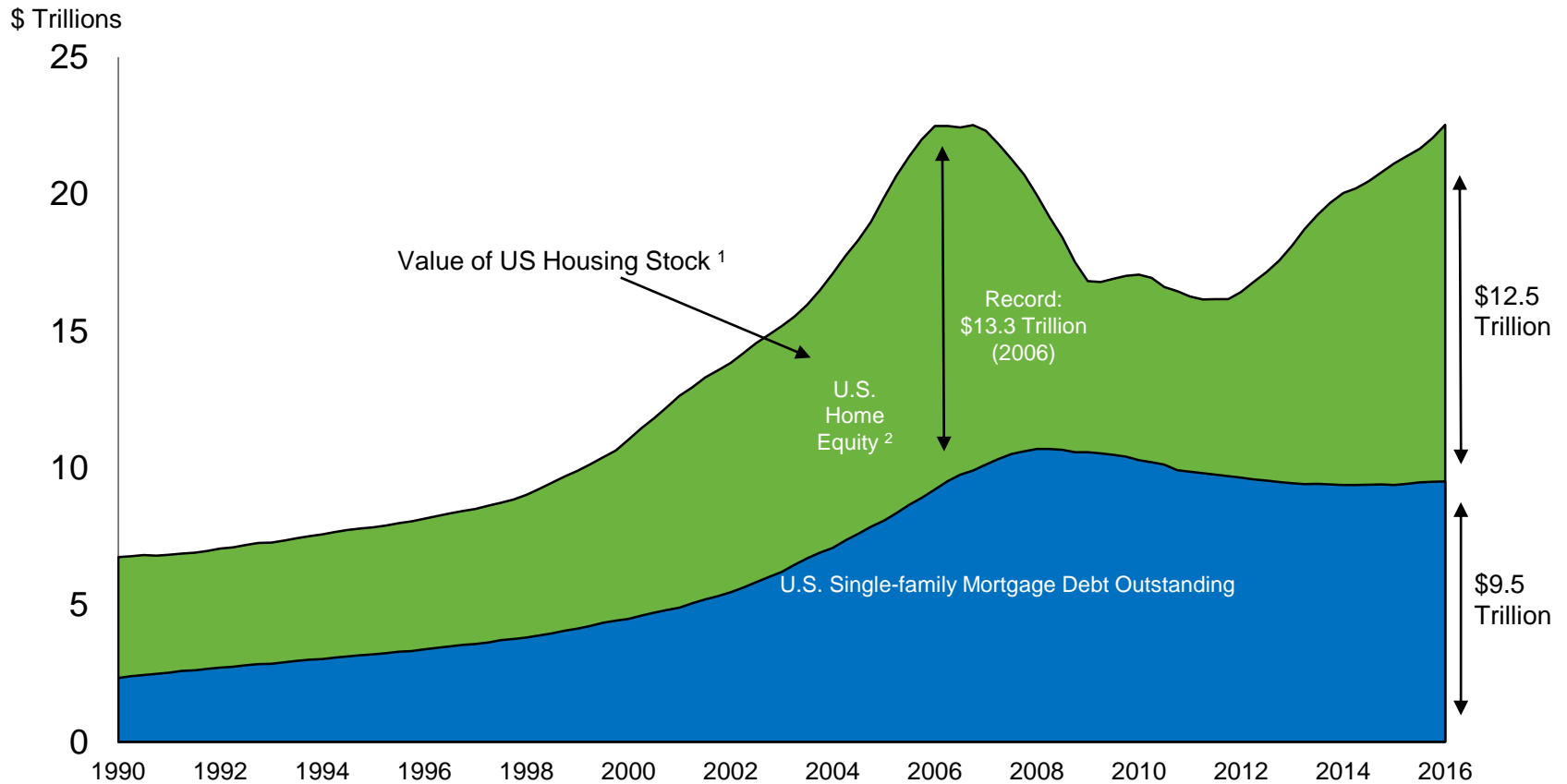
Current Loan-to-Value¹ Ratio of Freddie Mac's Single-Family Credit Portfolio (Weighted Avg; Reflects Estimated Current Market Values)



¹ Based on the unpaid principal balance of the single-family credit guarantee portfolio. Current LTV ratios are management estimates, which are updated on a monthly basis. Current market values are estimated by adjusting the value of the property at origination based on changes in the market value of homes in the same geographic area since that time.

Source: Freddie Mac. 2015 data as of December 31, 2015.

Homeowner equity increasing, MDO flat

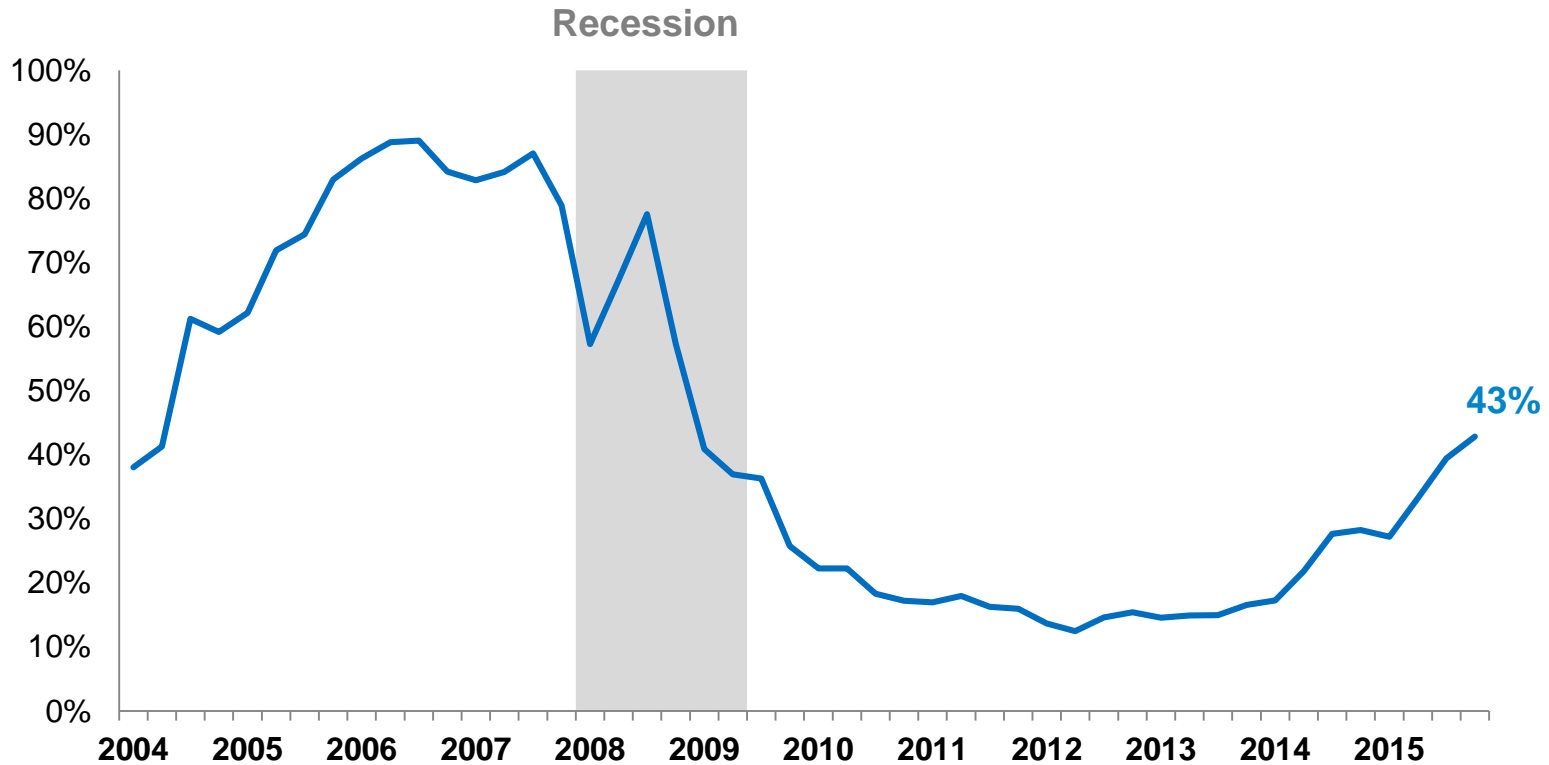


¹ Value of U.S. housing stock includes homes with and without underlying mortgages.

² U.S. home equity is the difference between the value of the U.S. housing stock and the amount of U.S. single-family mortgage debt outstanding.

Source: Federal Reserve Board's Flow of Funds Accounts, June 9, 2016, Table B. 101. Data as of March 31, 2016.

Percent of loans with higher loan amount

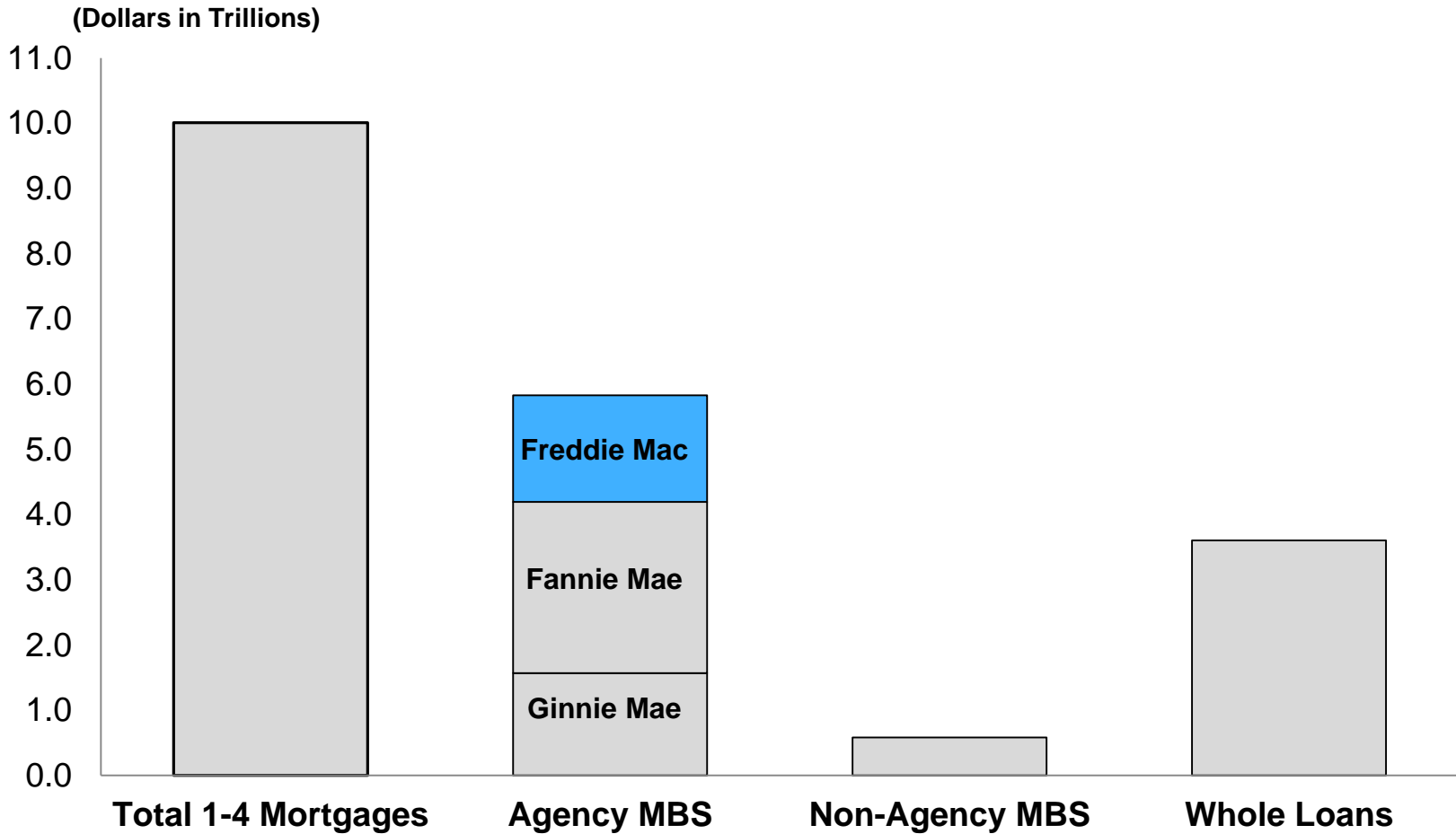


Source: Freddie Mac fourth quarter refinance statistics.

"Higher Loan Amount" refers to loan amounts that were at least 5 percent greater than the amortized unpaid principal balance (UPB) of the original loan

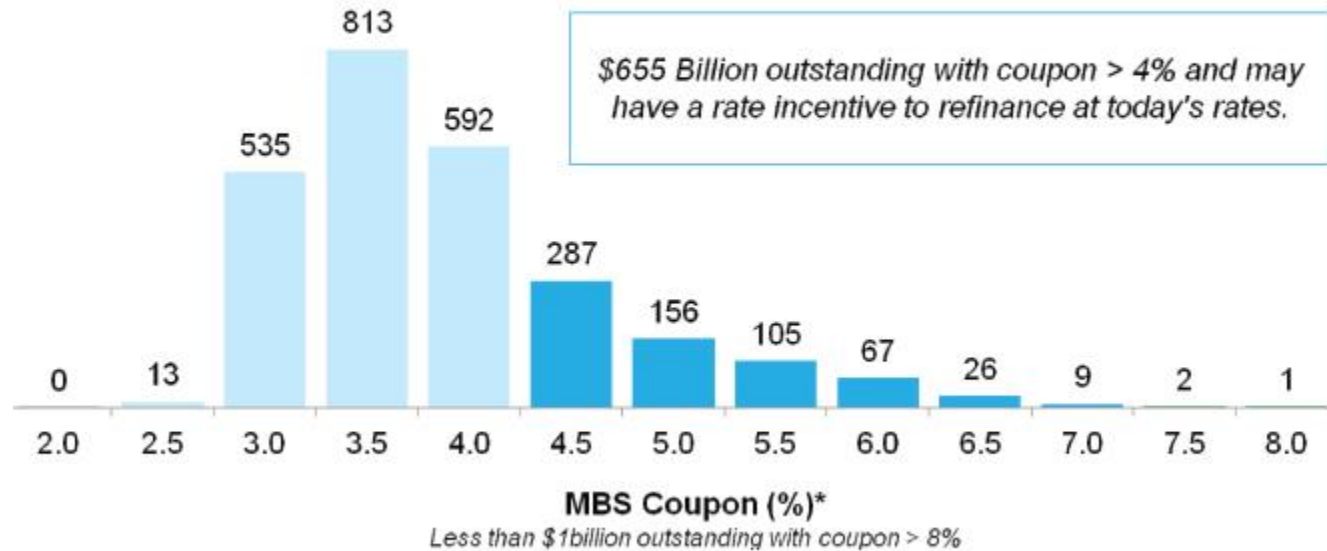
- **Falling mortgage rates delay the purchase market...**
- **... but the purchase market will eventually limit originations**

Freddie Mac Agency MBS Represents 16% of Total 1-4 Residential MDO as of 2016Q1



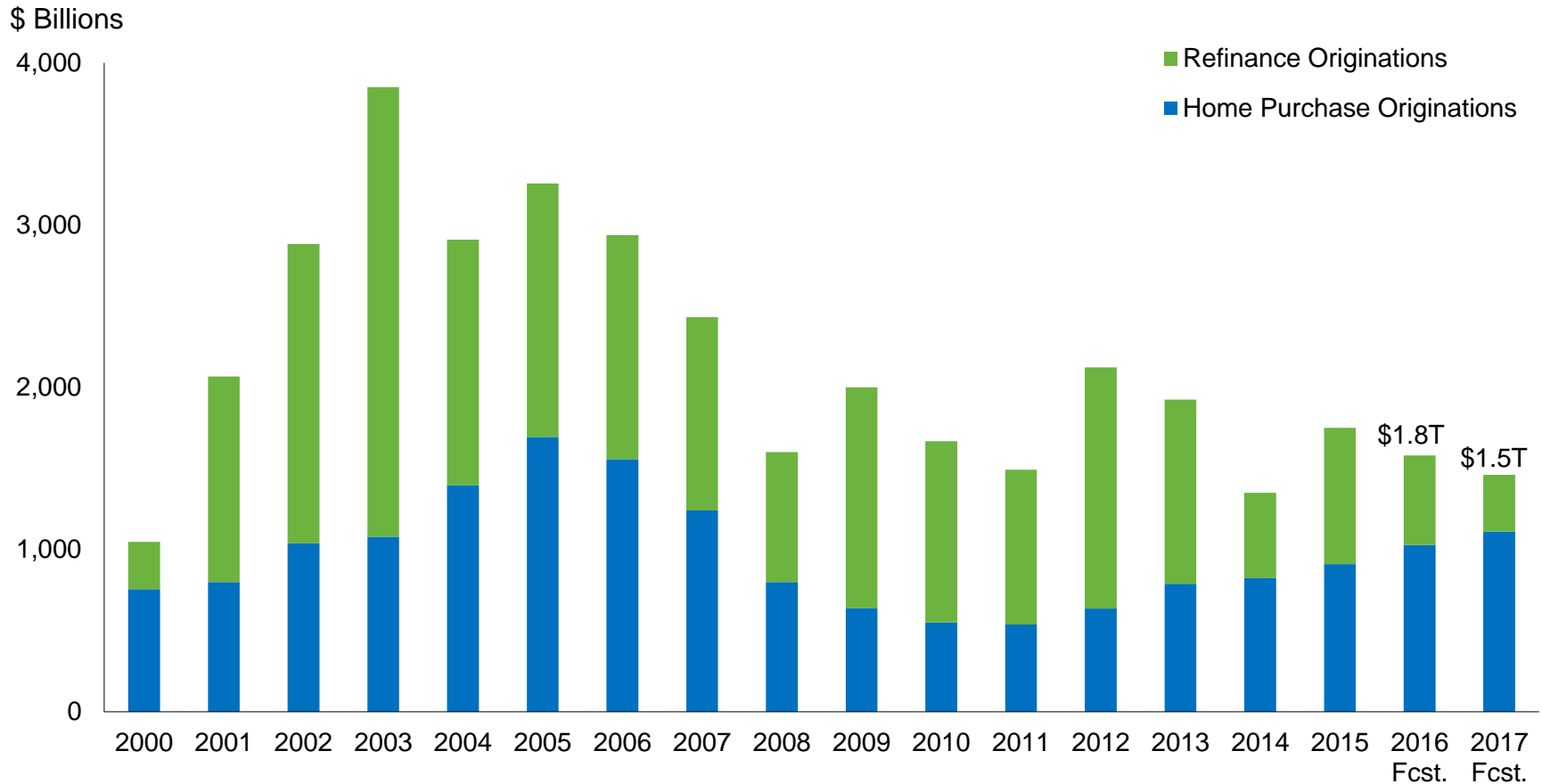
Sources: Federal Reserve Flow of Funds, Inside Mortgage Finance.

Outstanding Agency MBS Conv. Conforming 30-yr (Billions)



Source: Bloomberg Dec 2015

Single-family mortgage originations



Note: Estimates and forecasts by the Office of the Chief Economist do not necessarily represent the views of Freddie Mac or its management, should not be construed as indicating Freddie Mac's business prospects or expected results, and are subject to change without notice.

Source: U.S. Department of Housing and Urban Development and Federal Financial Institutions Examination Council. 2016 and 2017 data based on the May 2016 estimate of Freddie Mac's Economic and Housing Research Team

- **1/3 of Americans know someone who has—or have themselves—been evicted, foreclosed upon, or lost their housing in the past five years**
- **63 percent do NOT believe the 2008 housing crisis is over**
- **60 percent believe homeownership is a solid investment and almost 70 percent of non-owners aspire to own...**
- **...but 60 percent believe affordability is a serious problem and 68 percent believe it is harder today than for previous generations to have stable, affordable housing**

Source: *How Housing Matters*, MacArthur Foundation, June 2016

- **Likely to be limited impact on the overall US economy**
 - » Stronger dollar and volatility overseas may reduce growth modestly
- **Flight to quality will keep rates lower for a longer period**
 - » Mortgage/Treasury spreads likely to widen and soften the impact on housing
- **But still much uncertainty ahead**

For More Information



**Economic and Housing Research:
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