

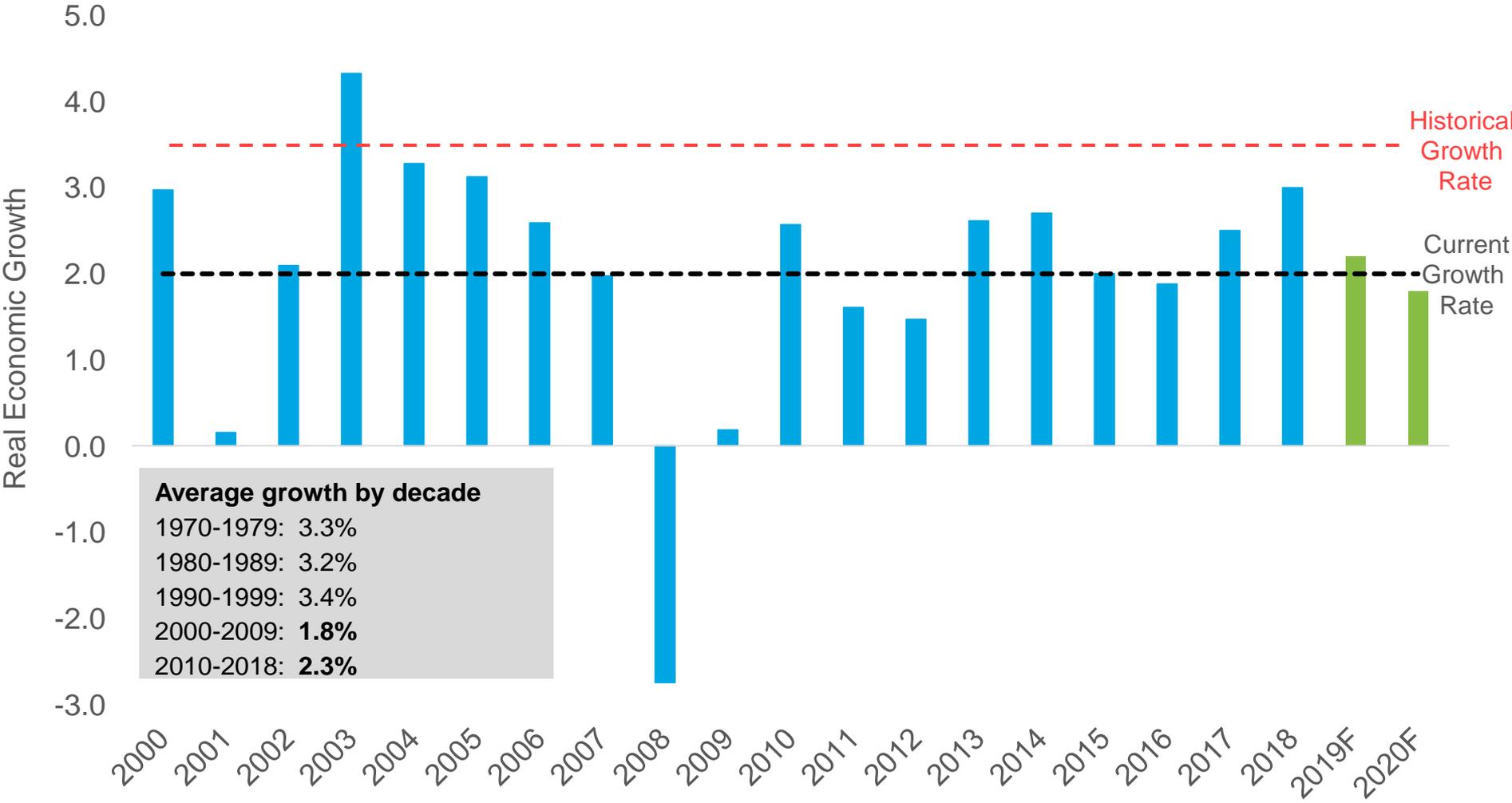
Economic and Housing Outlook

Sam Khater
Chief Economist

June 2019

- Economic Growth is Slowing to More Sustainable Growth Rate
- Job Market Very Tight, Wage Growth *Finally* Strengthening
- Structural Weakness Due to Rising Income and Wealth Inequality
- Home Sales are Rebounding and Price Growth is Stabilizing
- Demographic Tailwind is Approaching, But Supply of New Homes is Insufficient to Meet Demand
- Mortgage Performance is Solid but Consumer Credit is Worsening

Economic Growth is Decelerating...

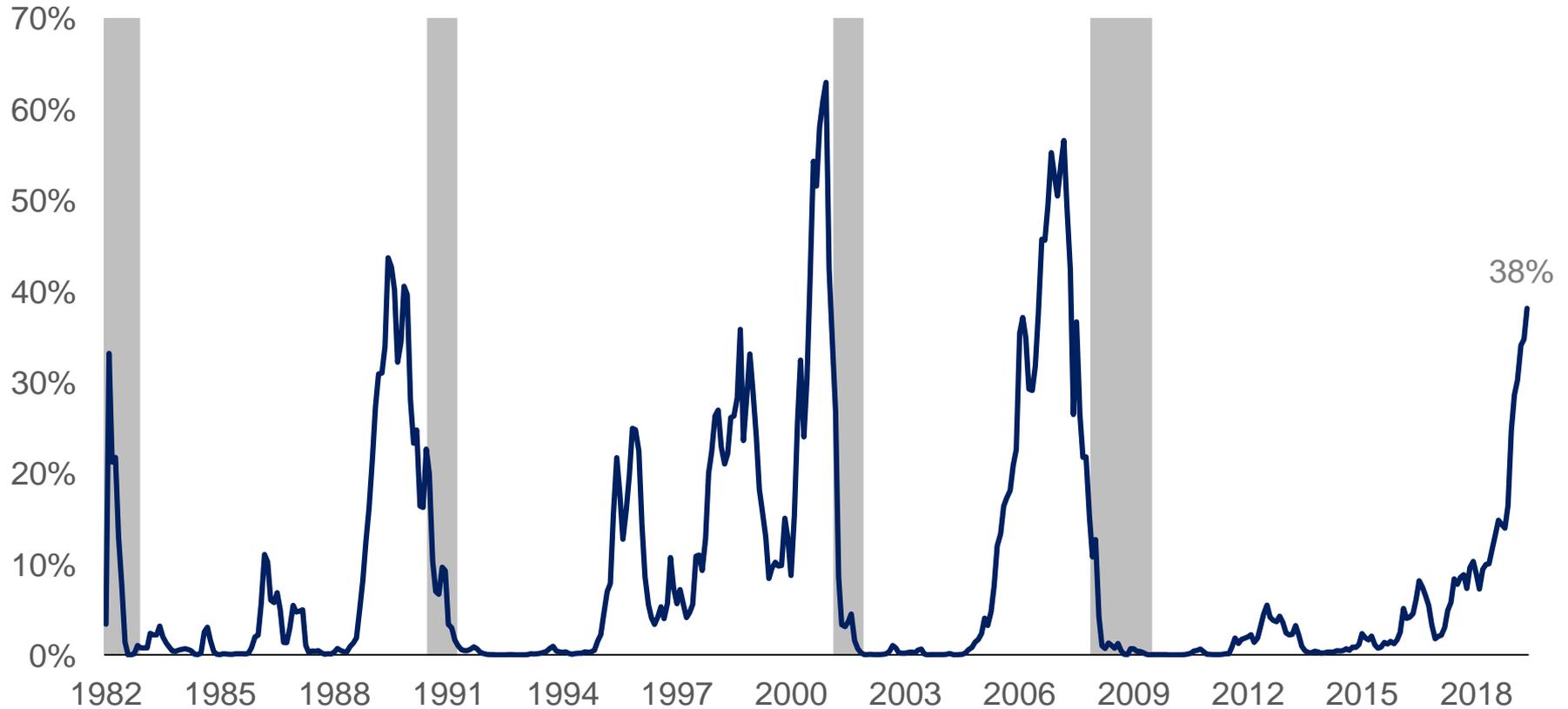


Source: US Bureau of Economic Analysis, Freddie Mac June 2019 Economic and Housing Research Outlook

Slower Economic Growth Combined With Trade & Tariff Potential Headwind is Causing the Market to Get Nervous



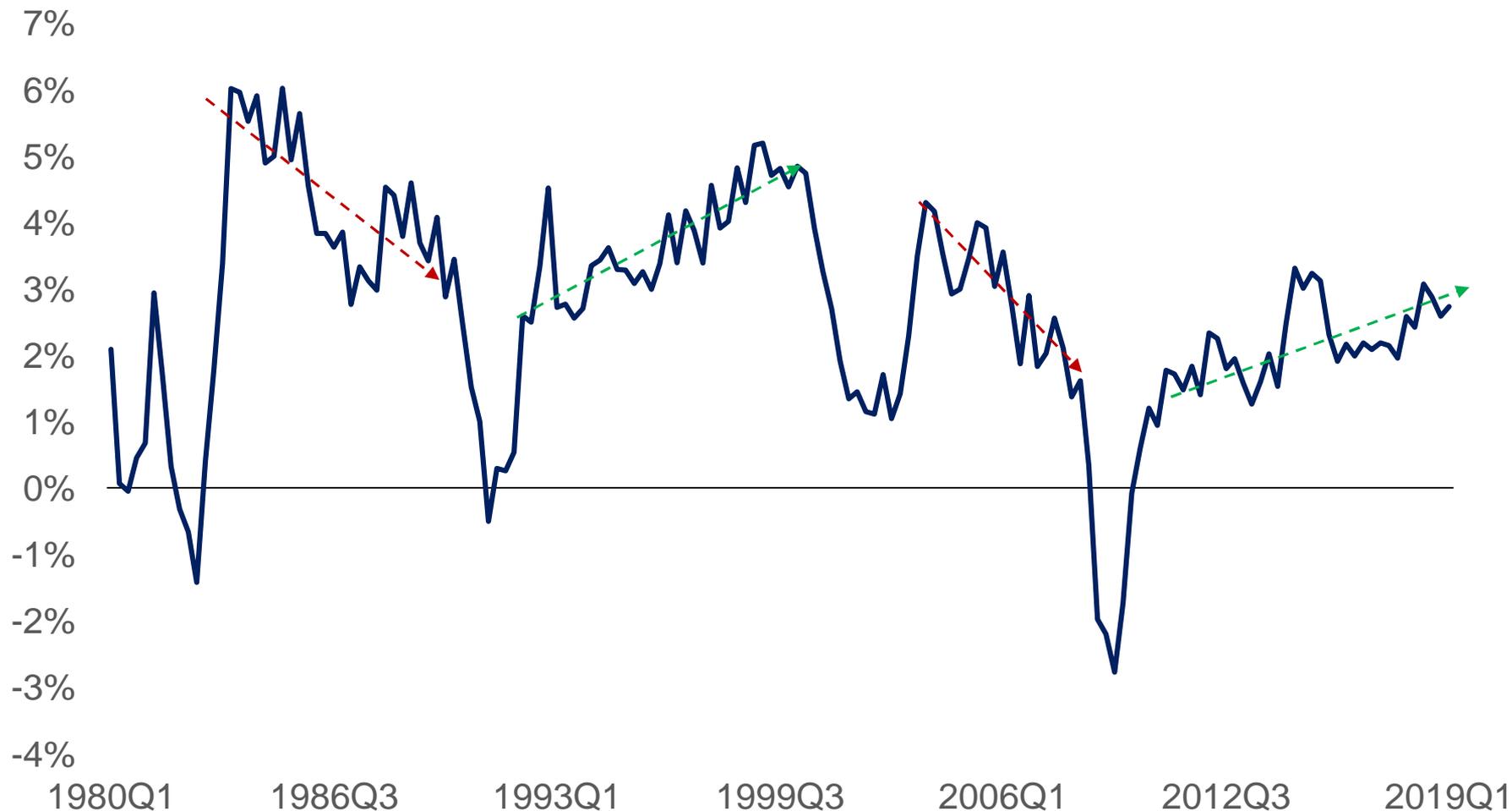
Recession Probability Framework



Source	Prob of a Recession (%)	Timeline	Variables
Freddie Mac	38	Twelve months ahead	Slope of Yield Curve
J.P Morgan	47	Within one year	Economic data

Despite the Negative Headlines, Consumer Spending is on Solid Ground

Percent Change from Year Ago in Final Domestic Sales



Source: US Bureau of Economic Analysis

Unemployment Rate at 50 Year Low and Stable



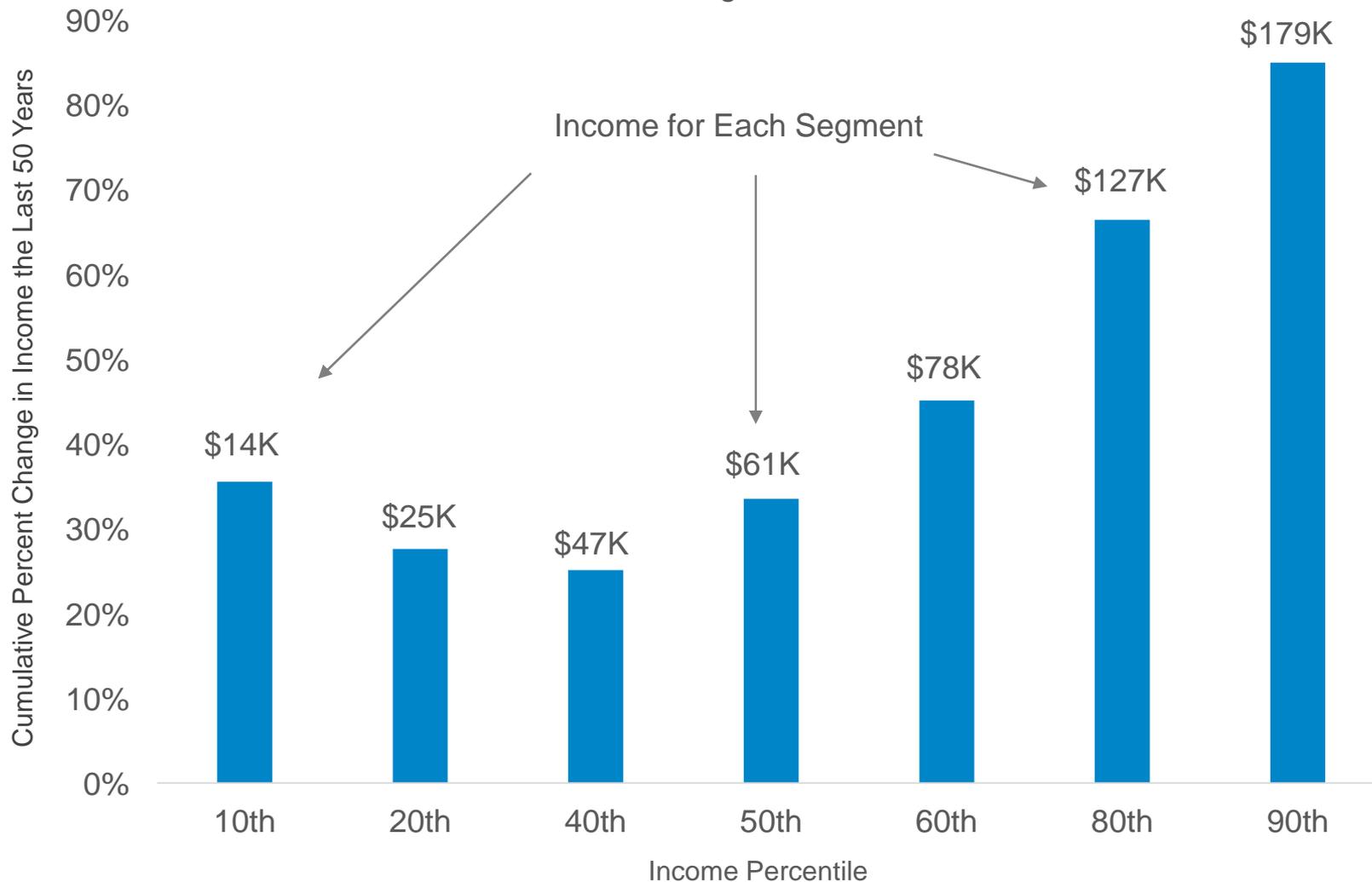
While Labor Market is Doing Well, Until Very Recently Wage Growth Had Been Very Low...



Source: US Bureau of Labor Statistics

...And Weak Income for Lower Middle Class Has Been an Issue for Decades

Cumulative Percent Change in Income Last 50 Years

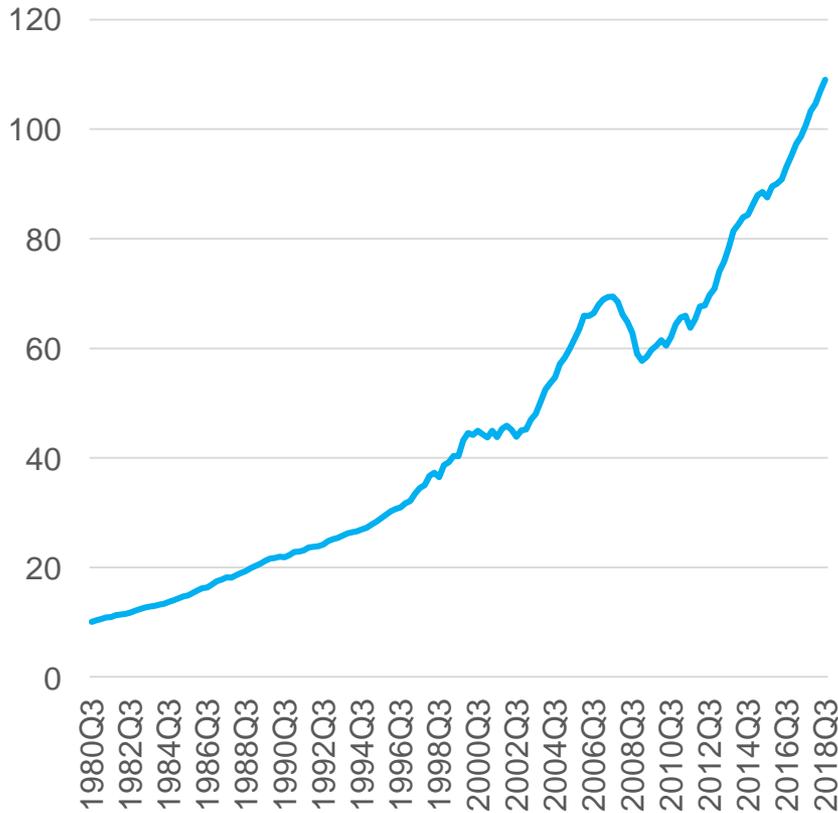


Note: Bureau of the Census 1967 to 2017 Incomes

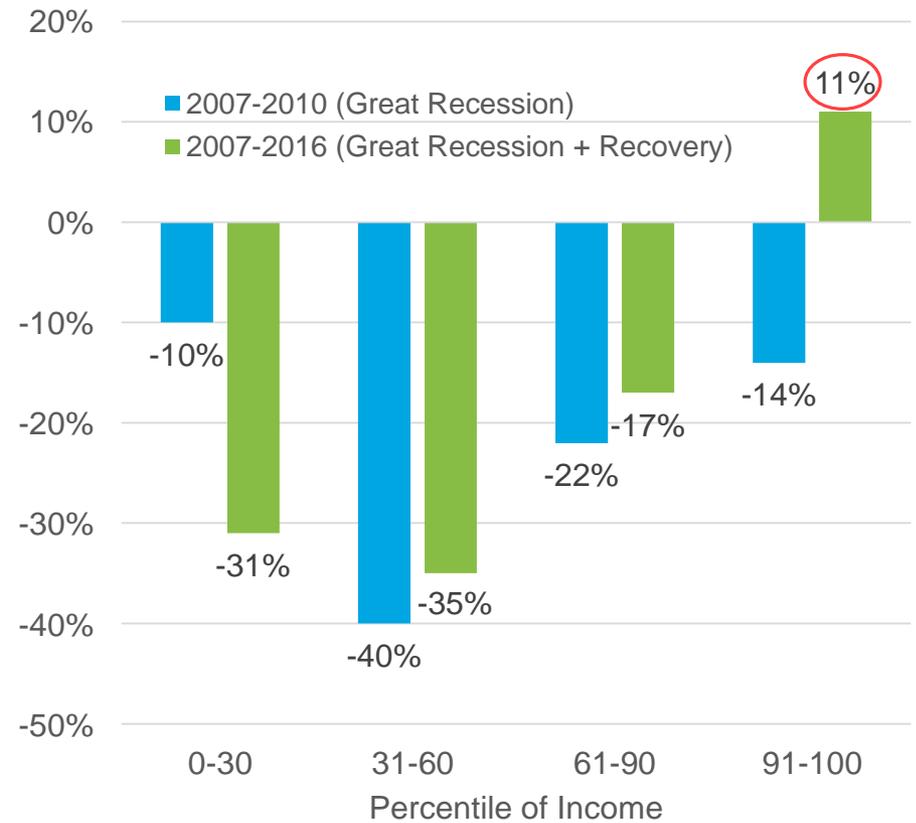
Household Wealth Soaring; However Wealth Has Declined for All But Wealthiest Americans



Household Wealth (\$Trillions)



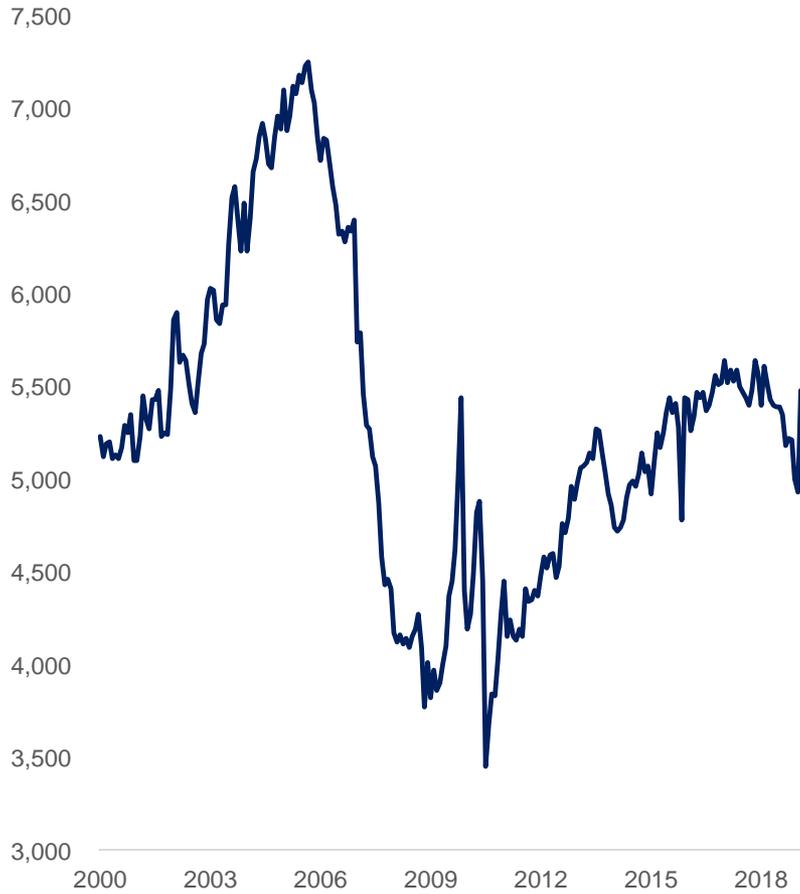
Percent Change in Real Wealth (by Income Distribution)



Source: Flow of Funds and Fed Notes “A Wealthless Recovery? Asset Ownership and the Uneven Recovery from the Great Recession” Lisa Dettling, Joanne Hsu and Elizabeth Llanes” Sept, 2018. The 2016 data in the wealth change is the latest available.

After the 2018 Slowdown, Home Sales Slowly Regain Momentum in 2019

Existing Home Sales (Ths. #, SAAR)

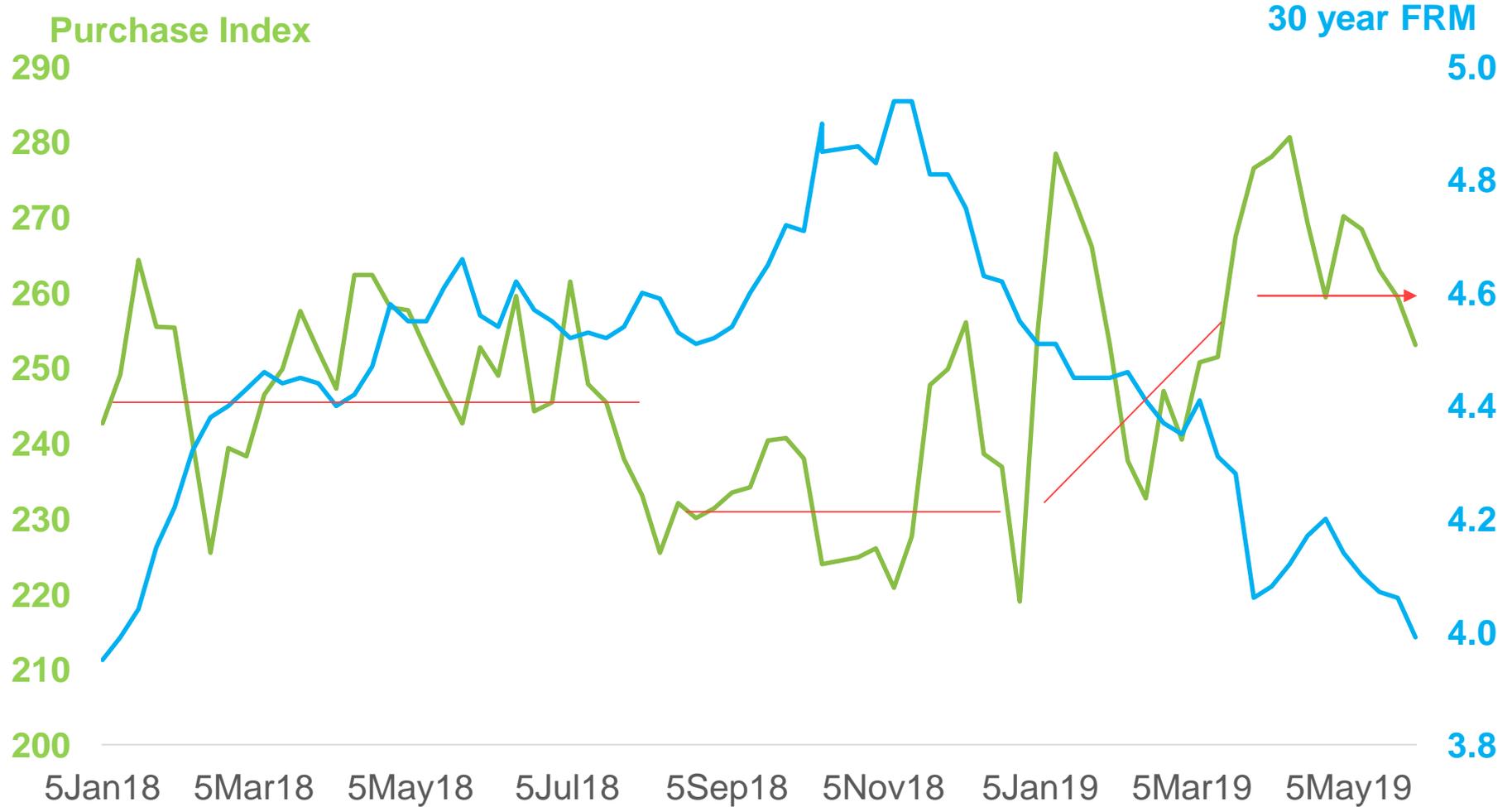


Existing Home Sales (YoY%)



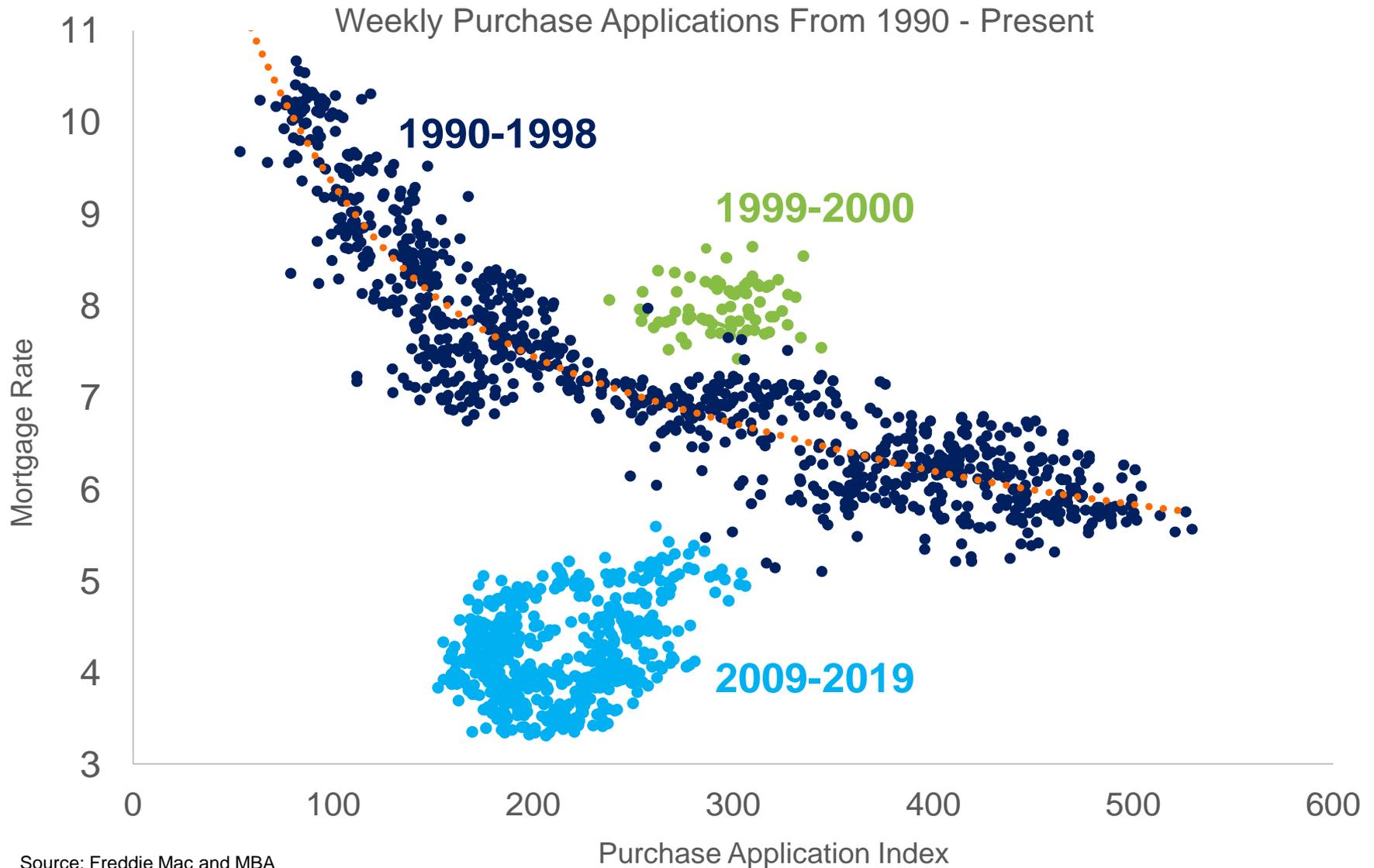
Sources : National Association of Realtors (NAR)

Purchase Demand is Higher than Early Last Year Before the Slowdown



Source: Freddie Mac and MBA

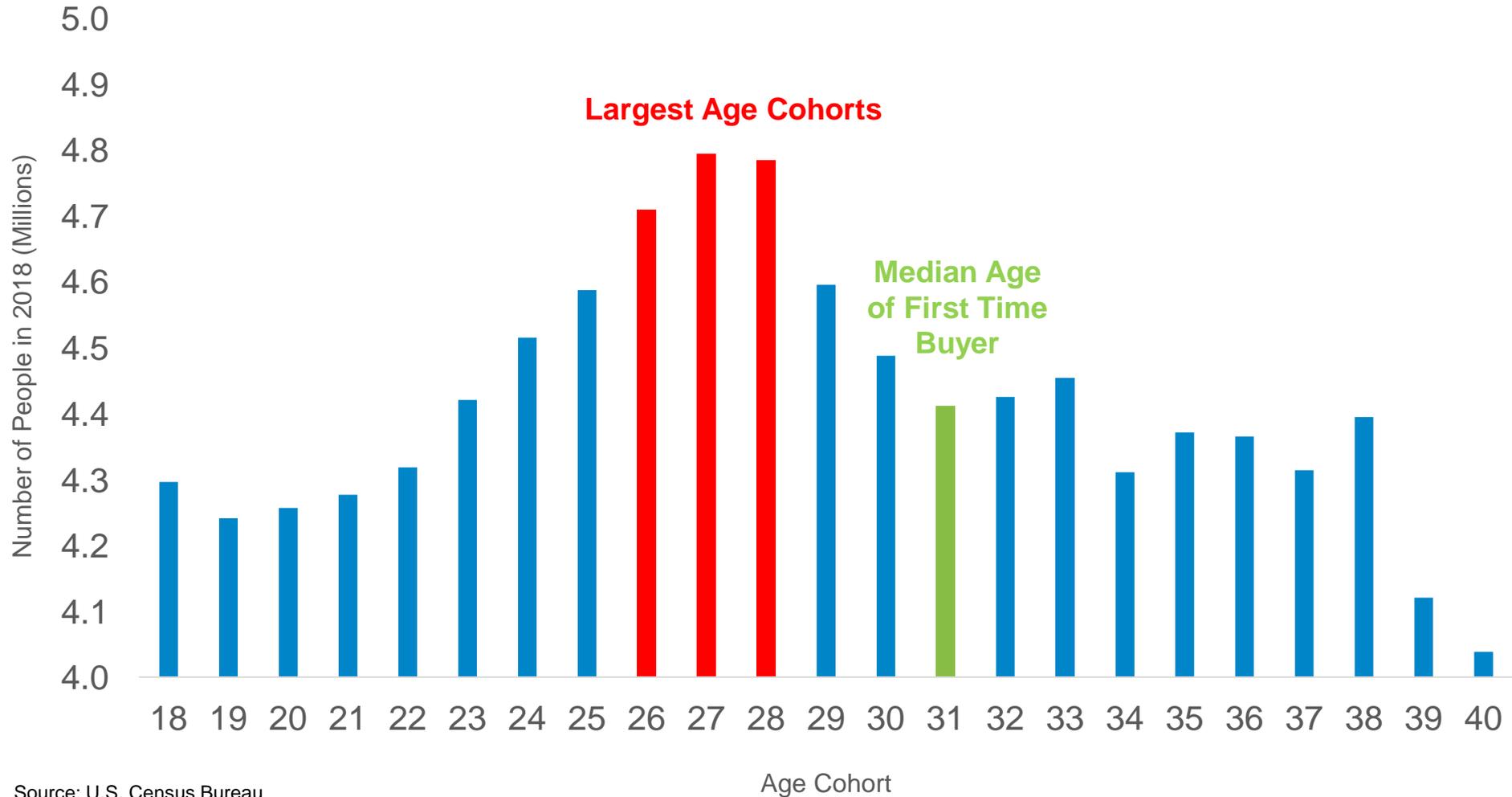
Long-Term View Suggests Purchase Market Clearly Remains Wounded



Source: Freddie Mac and MBA

Large Wave of Entry-Level Buyers Coming

Population by Age Cohort, 2018

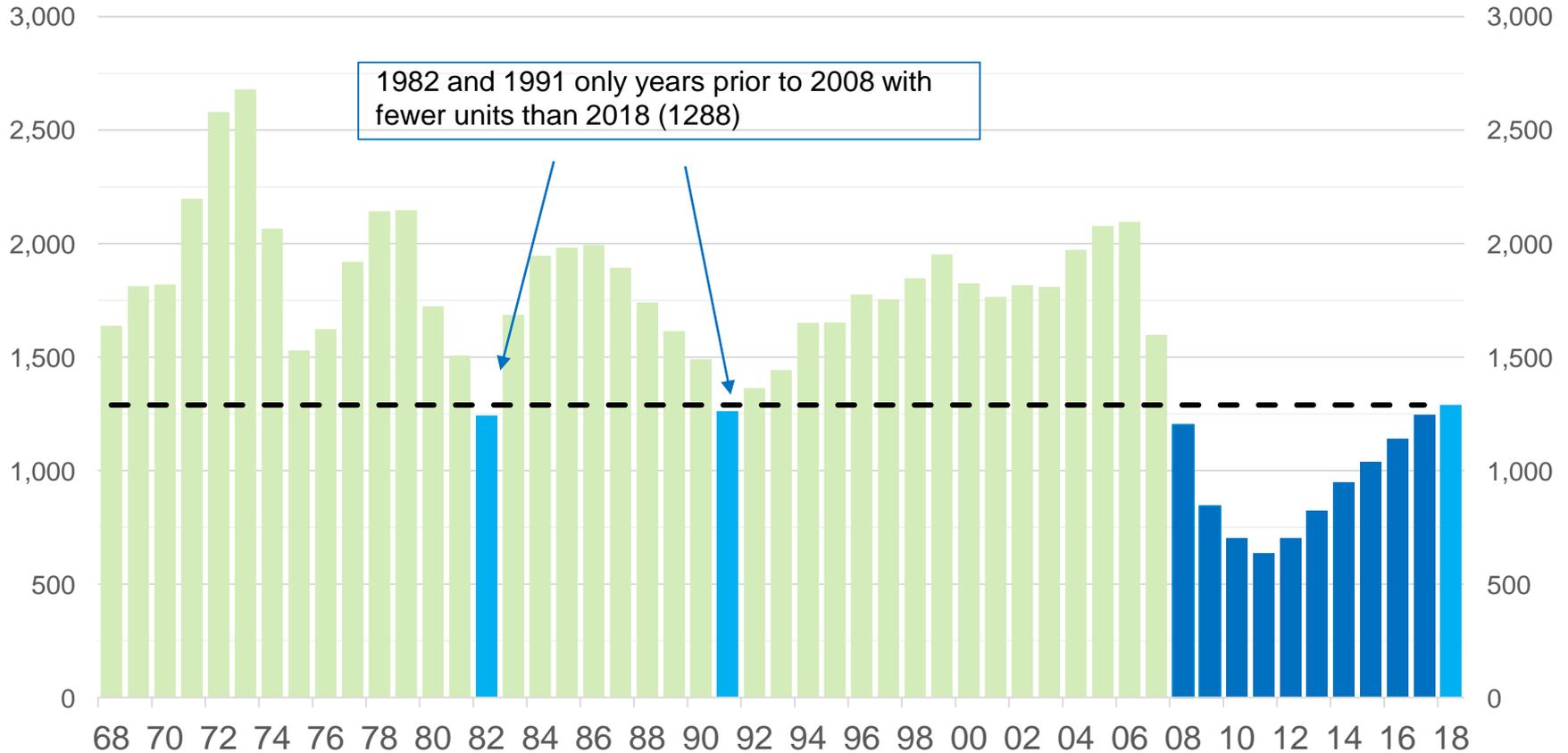


Source: U.S. Census Bureau

U.S. Added Fewer Housing in 2018 Than In Only Two Years Prior to 2008

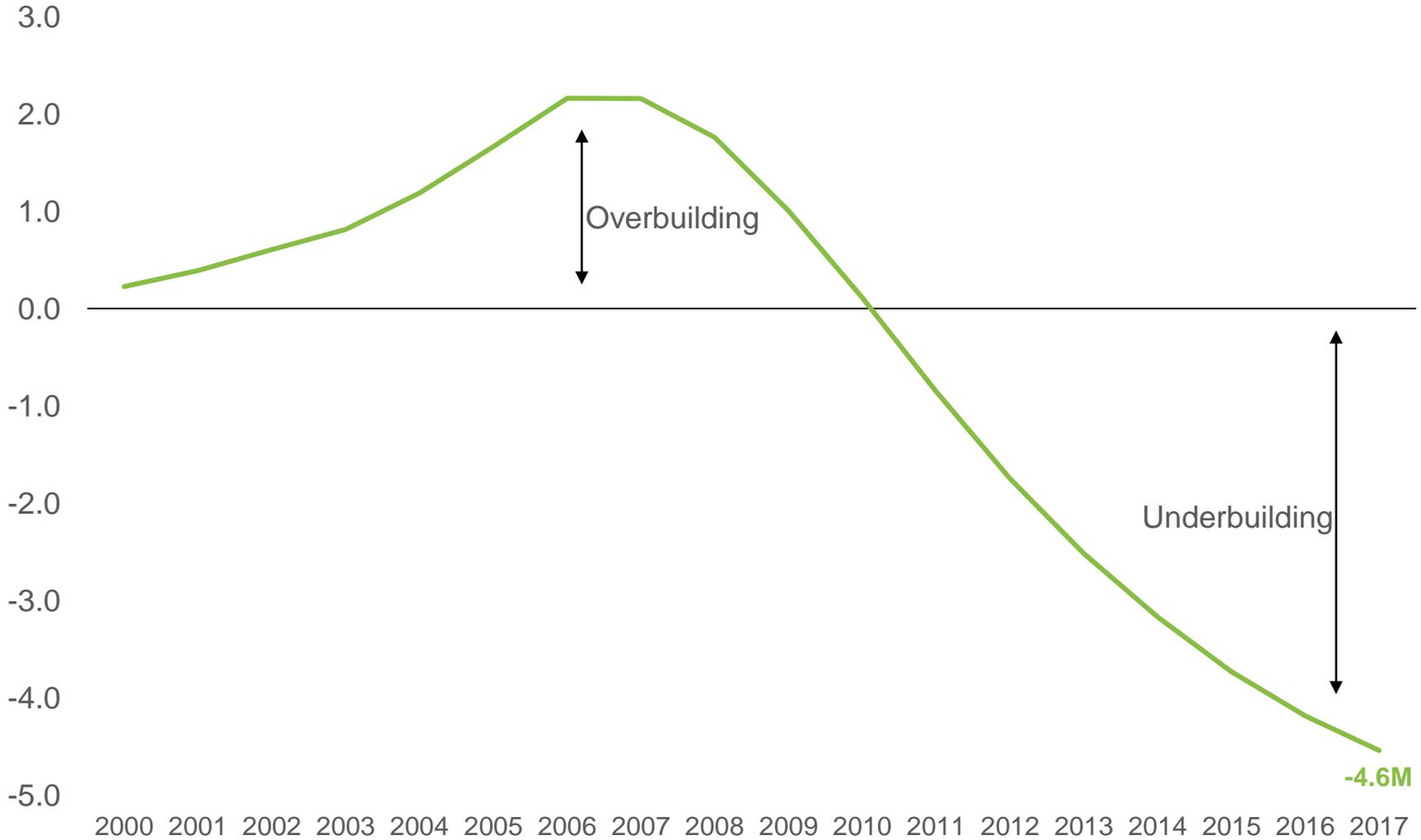
U.S. new housing supply low relative to history

U.S. annual housing completions and manufactured home shipments (1000s)



Source: U.S. Census Bureau and Department of Housing and Urban Development, Institute for Building Technology & Safety

Cumulative Shortfall in Supply Since 2000 is over 4 Million Housing Units...

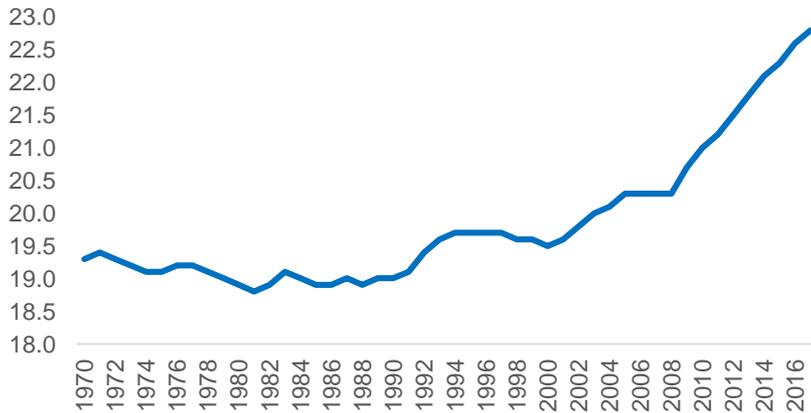


Source: U.S. Census Bureau and Department of Housing and Urban Development, Institute for Building Technology & Safety

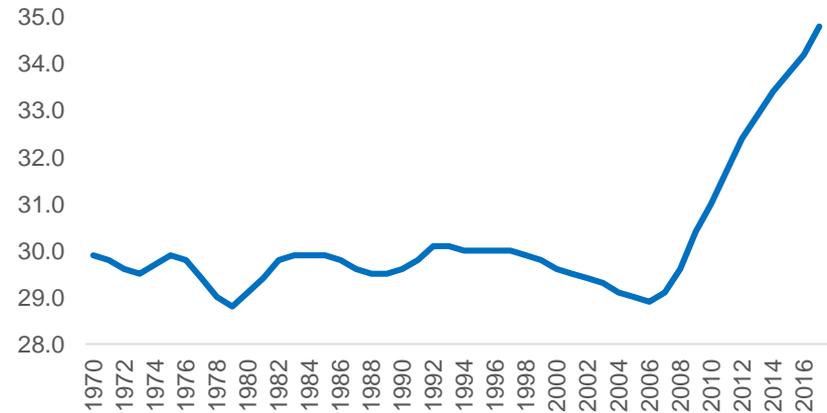
Lack of Investment Not Limited to Housing but the Entire Nation's Capital Stock of Assets



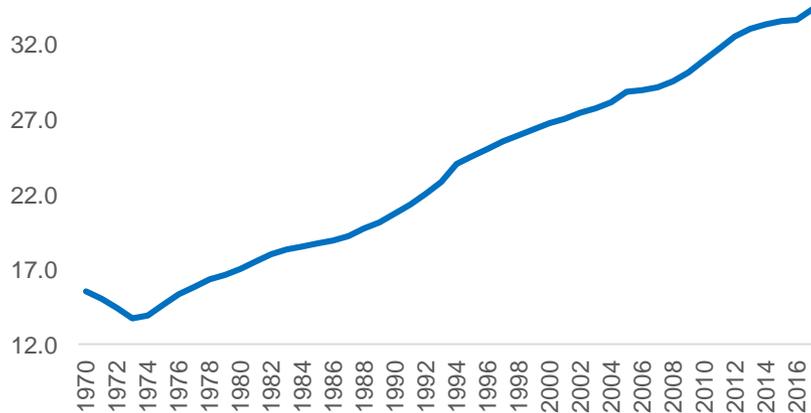
Age of All Capital Stock



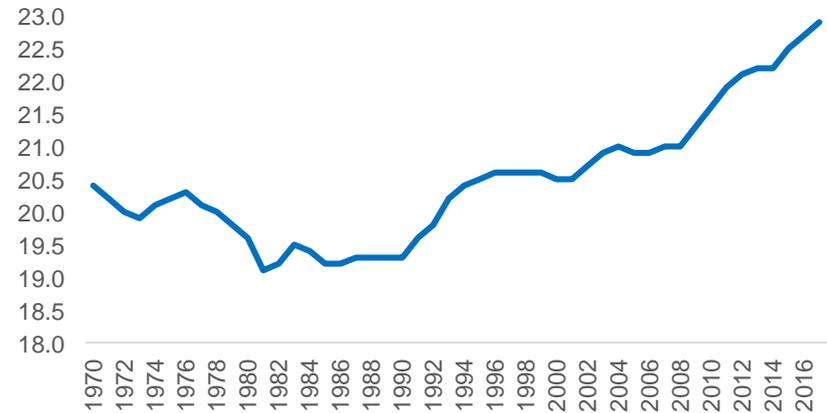
Age of Single-Family Housing



Age of Multi-Family Housing

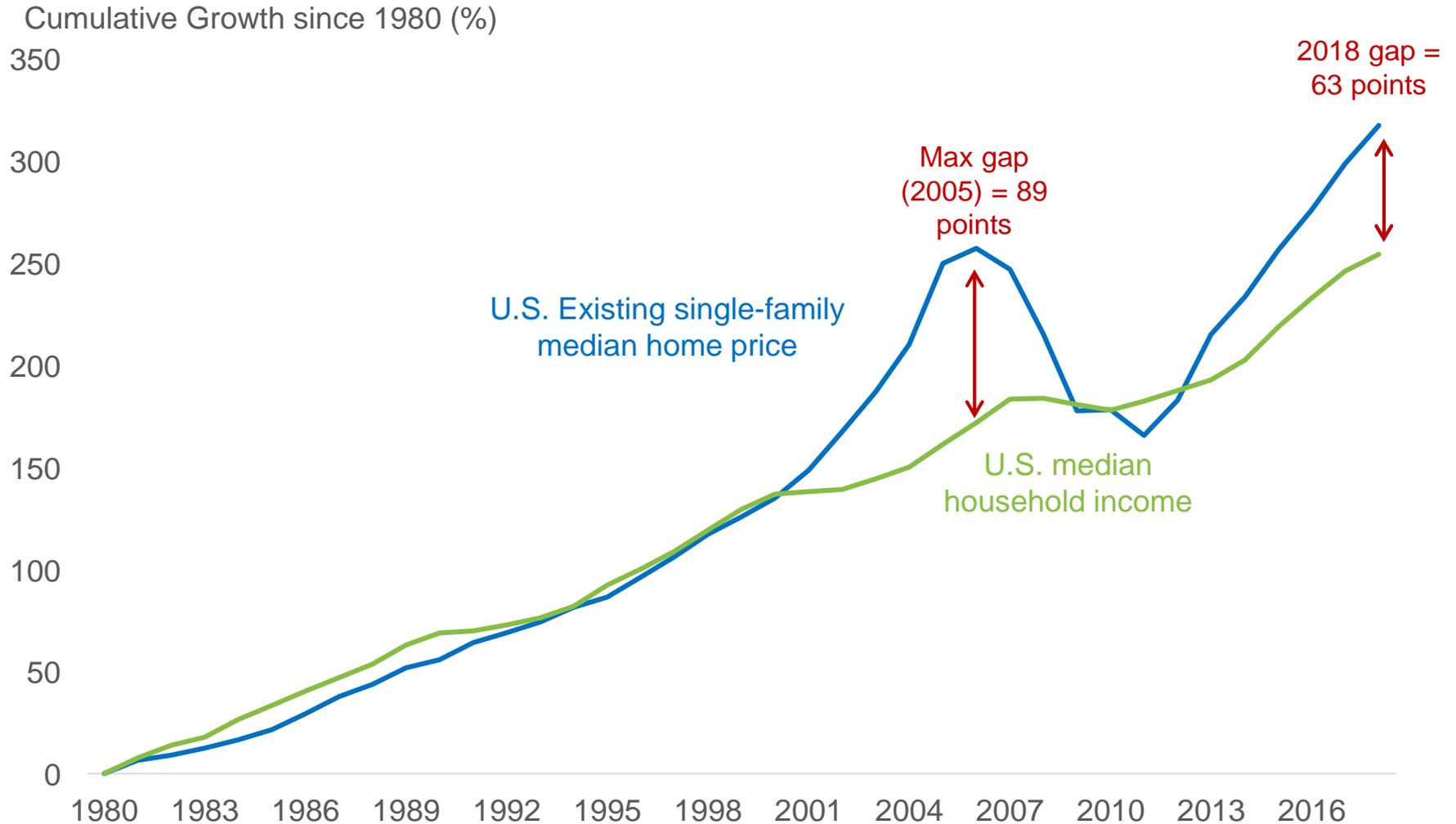


Age of Commercial Real Estate



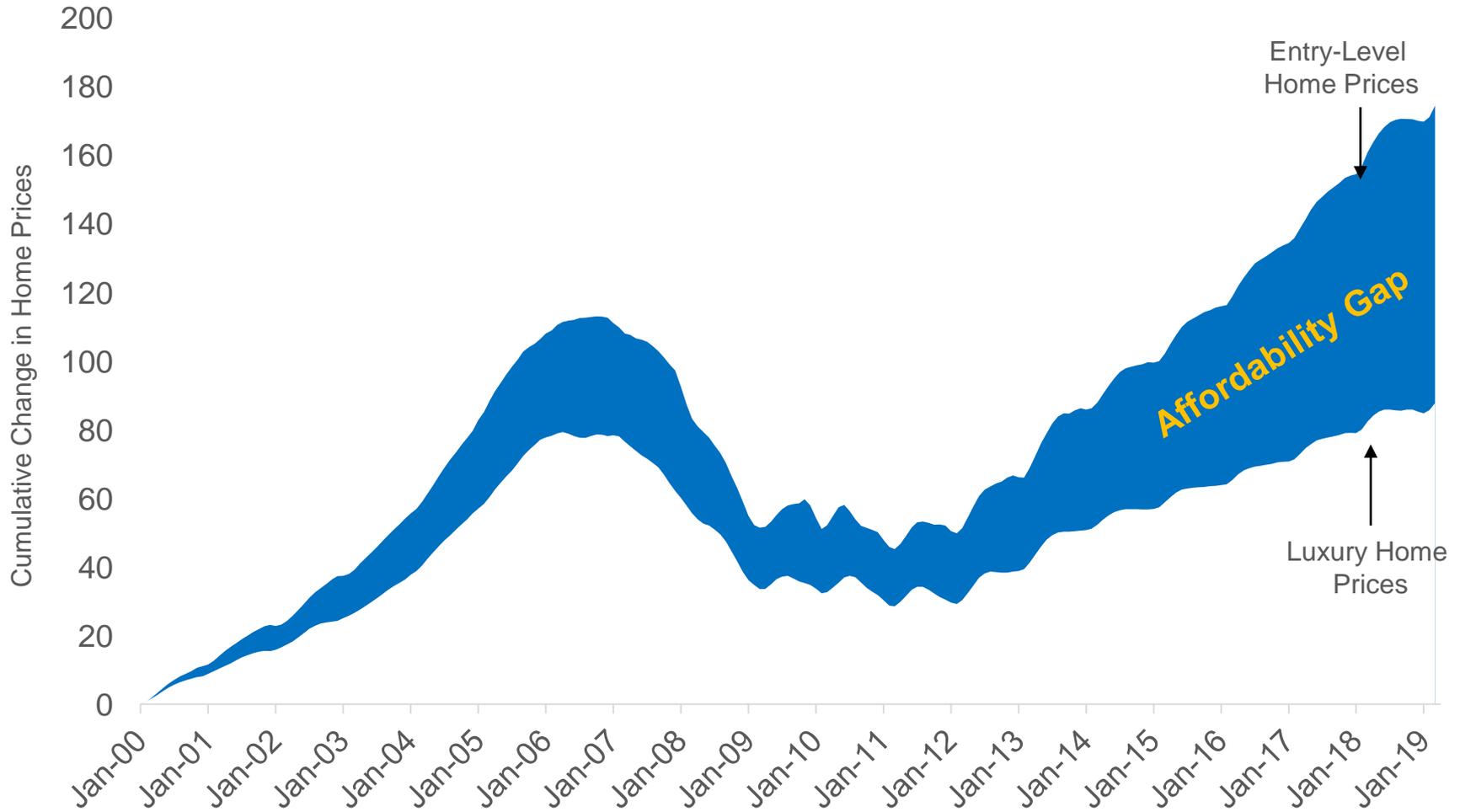
Source: Bureau of Economic Analysis

Lack of Supply Causing Affordability to Worsen



Source: Census and NAR

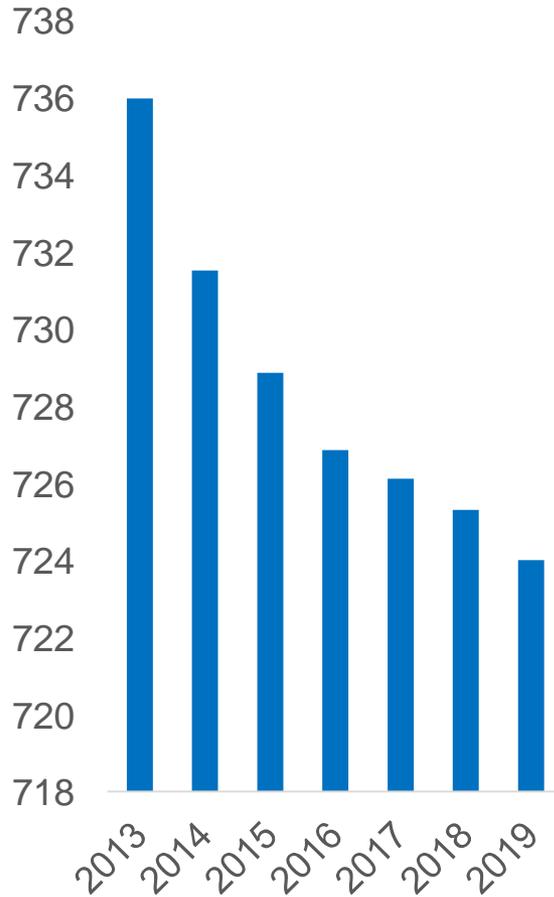
Underbuilding is Causing a Large and Widening Gap Between Entry and Luxury Price Increases...



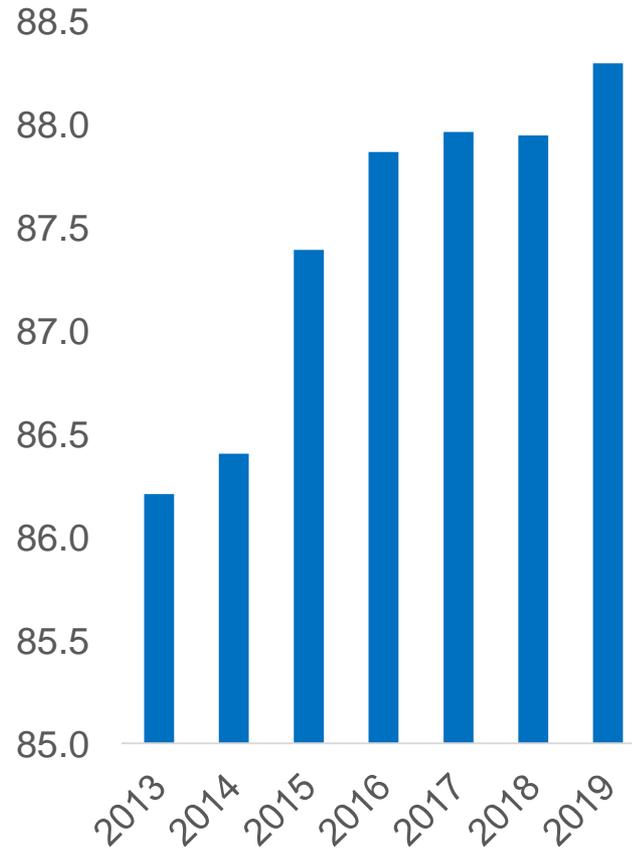
Source: CoreLogic

Expansion in Purchase Underwriting Has Slowed

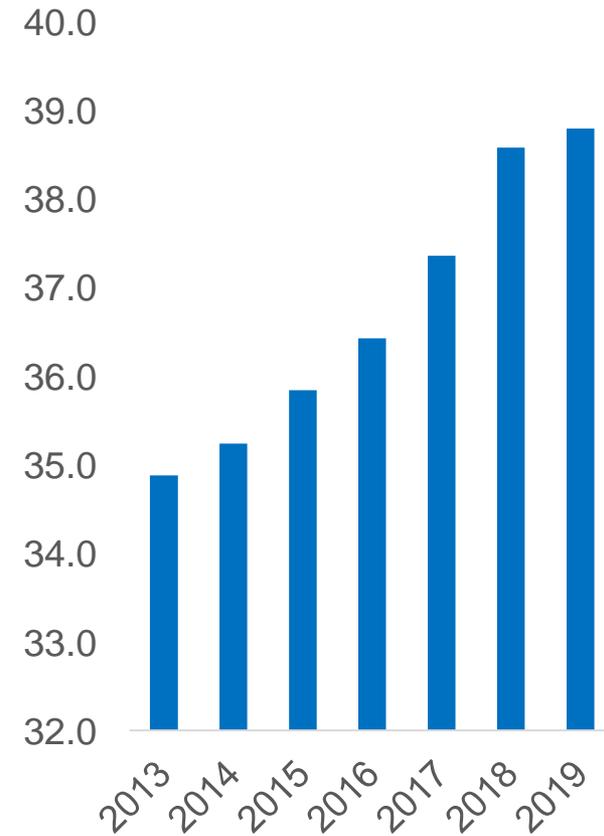
FICO



LTV

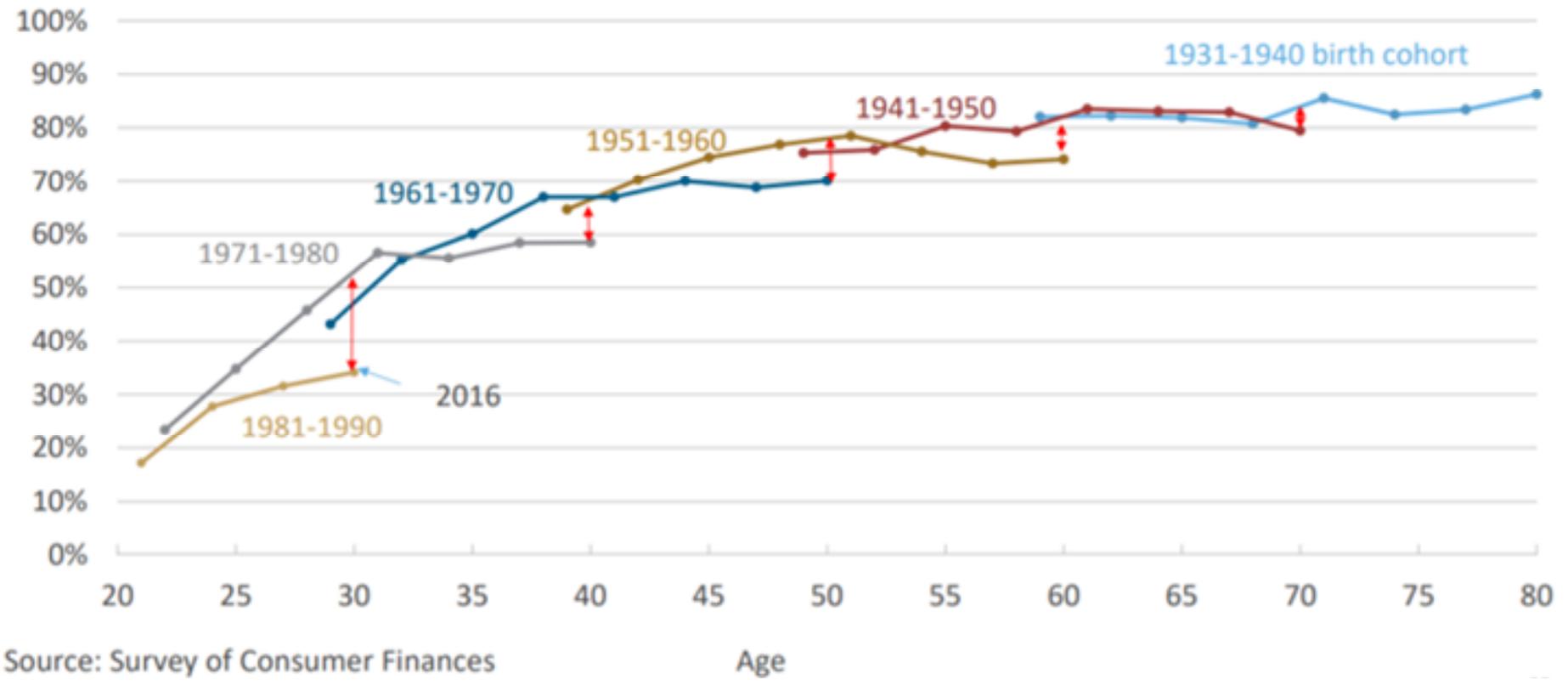


DTI



Note: FICO stands for Fair Isaacs Company, which creates a credit score sometimes referred to as the FICO score. LTV is an acronym for Loan-To-Value ratio and DTI is the Debt to Income ratio. 2019 data through March. Source: eMBS

Recent Cohorts (Millennials) Homeownership Rates Are Lagging Due to Affordability Obstacles

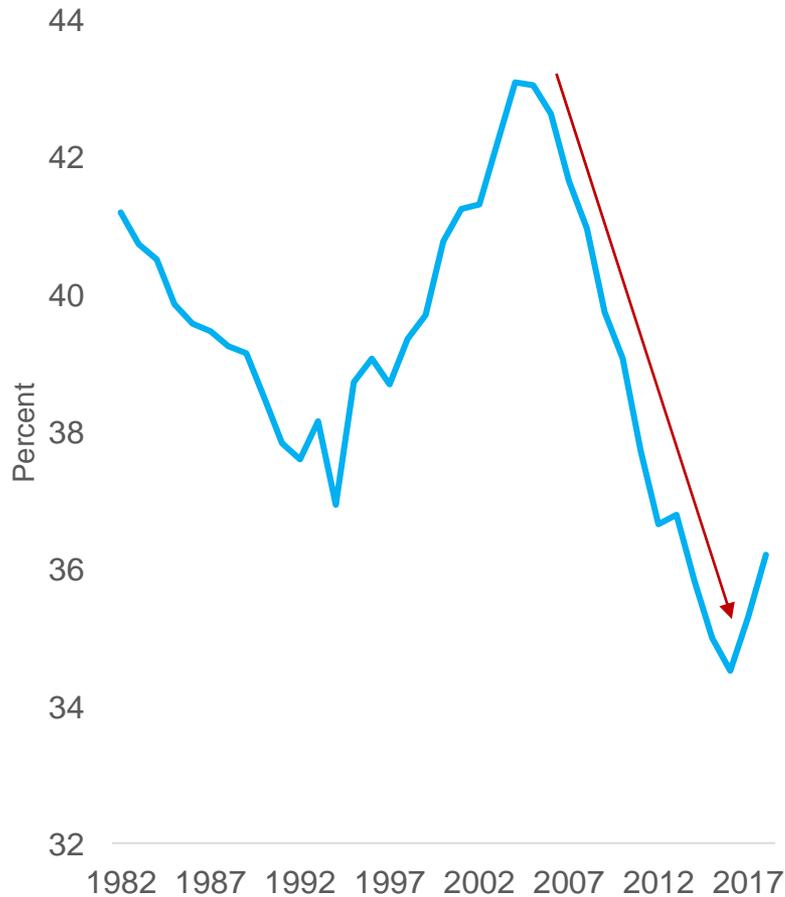


Source: Federal Reserve

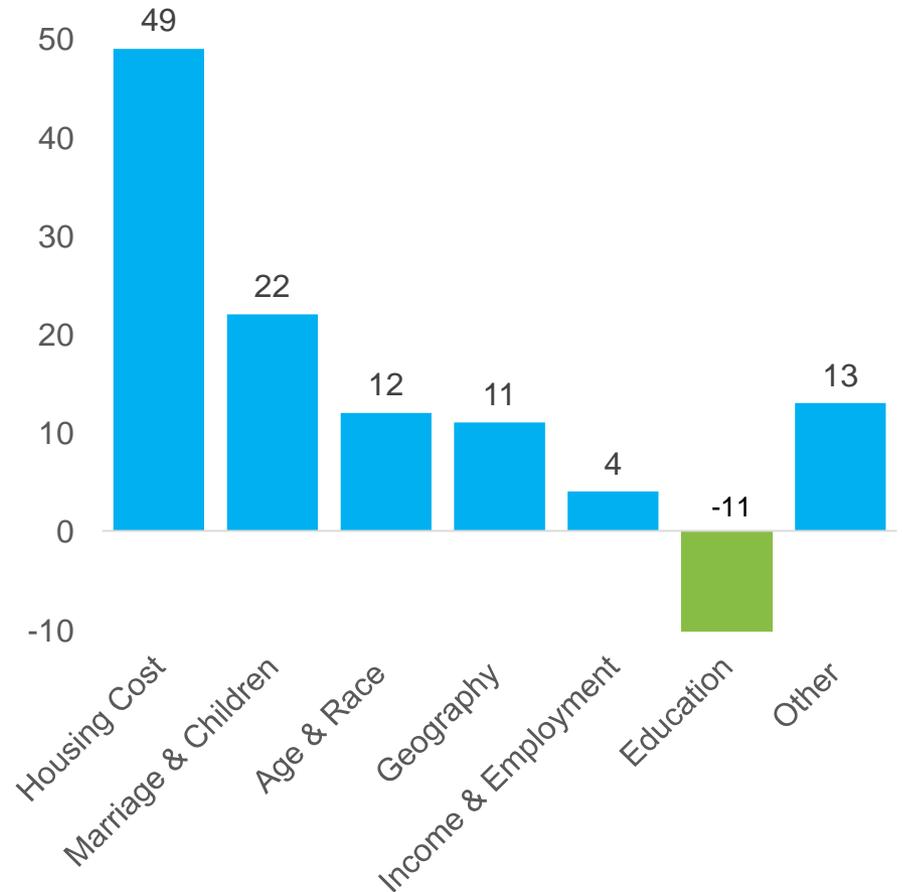
High Housing Costs Are the Main Culprit Behind the Drop in Young Adult Homeownership Rates



Homeownership Rate of Young Adults
(Less than 35 Years Old)



Contribution to Homeownership Gap for Young Adults, 2000 to 2016

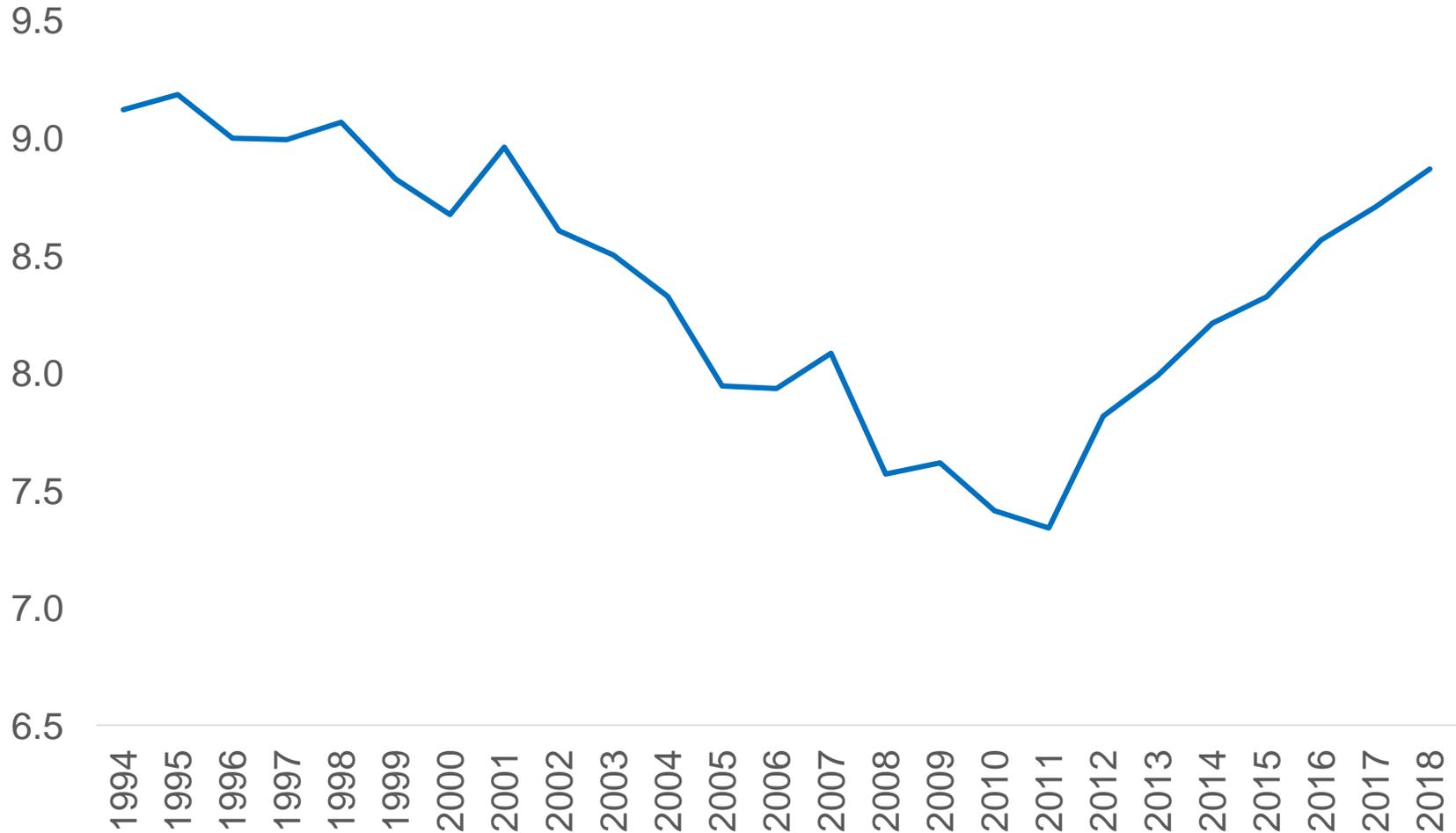


Source: Census and Freddie Mac

...Causing Many First Time Buyers Moving Further Out in the Suburbs Due to Affordability Pressures



Distance From City Center for Inner Ring Quartile First Time Buyers

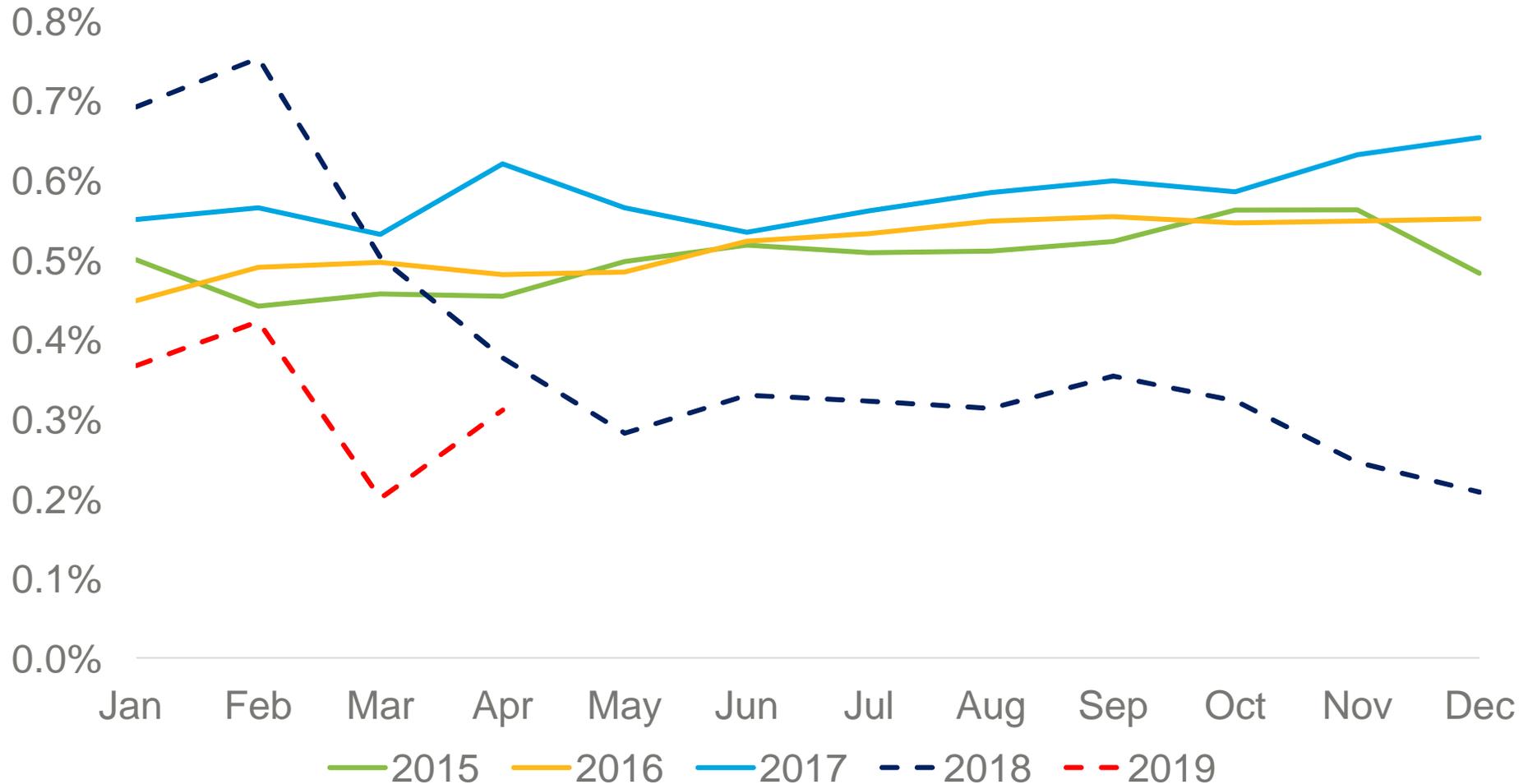


Source and Note: This is using Freddie Mac first time homebuyers. Each loan was geocoded and we computed the Euclidean distance to city center for each property. The analysis was done for the 50 largest metros.

Home Prices Decelerated in 2018, but Have Already Stabilized



Month over Month Home Price Change (SA)



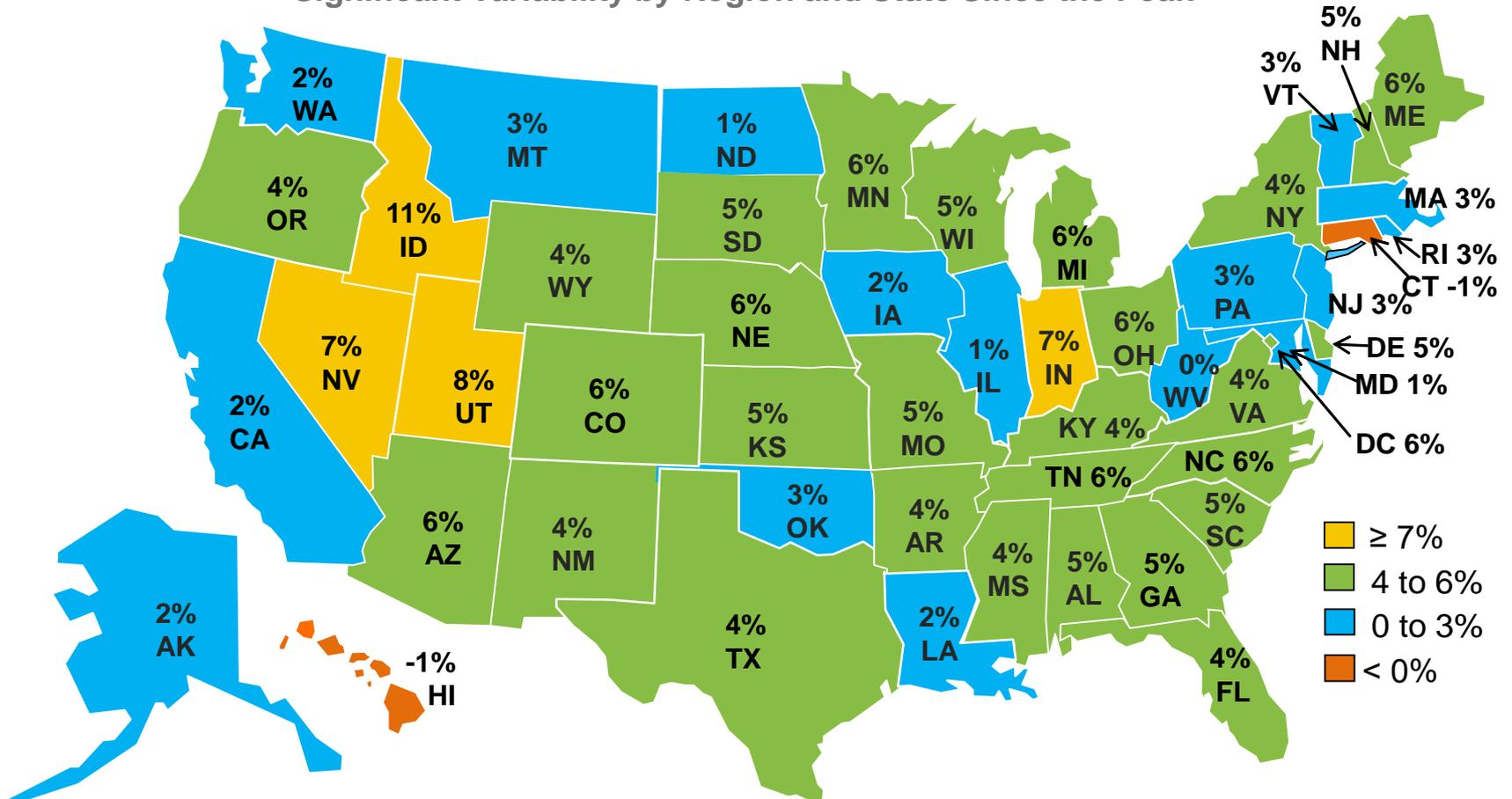
Source: Freddie Mac House Price Index, SA
Data as of April 30, 2019

Home Price Performance by State – April 2018 to April 2019¹



United States: 3.7%

Significant Variability by Region and State Since the Peak



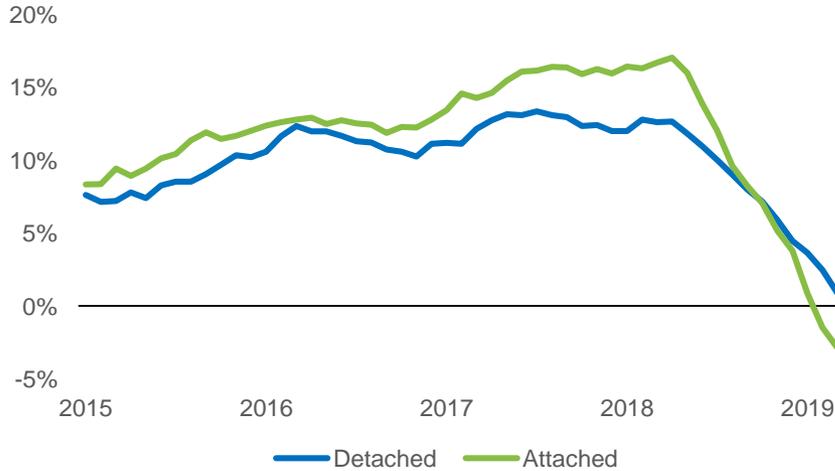
¹ The Freddie Mac House Price Index for the U.S. is a value-weighted average of the state indexes where the value weights are based on Freddie Mac's single-family credit guarantee portfolio. Other indices of home prices may have different results, as they are determined using different pools of mortgage 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

Slowdown in Home Prices Occurred More Intensely in Attached Properties



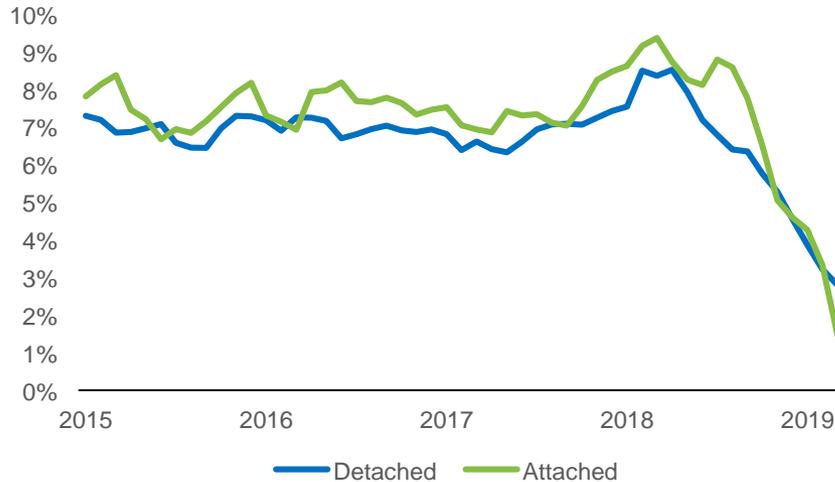
Seattle



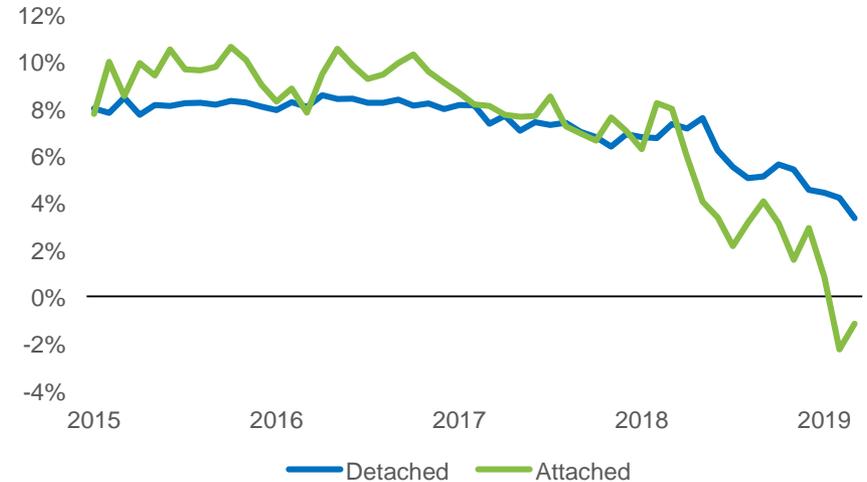
New York



Los Angeles



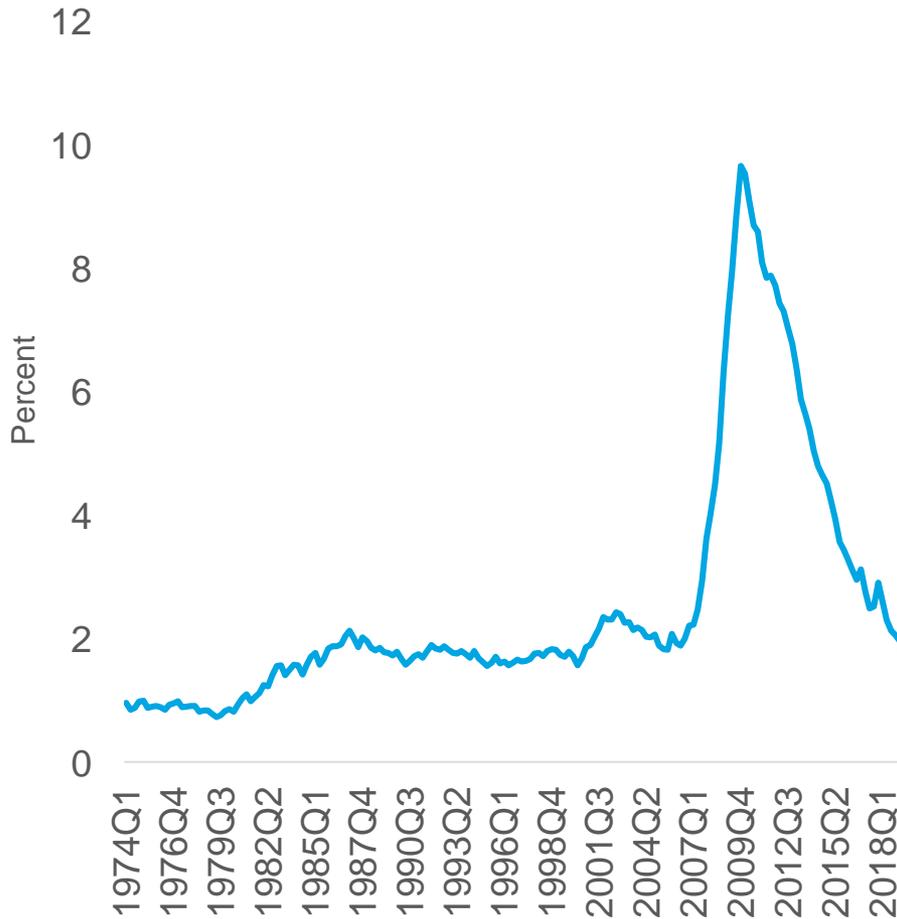
Dallas



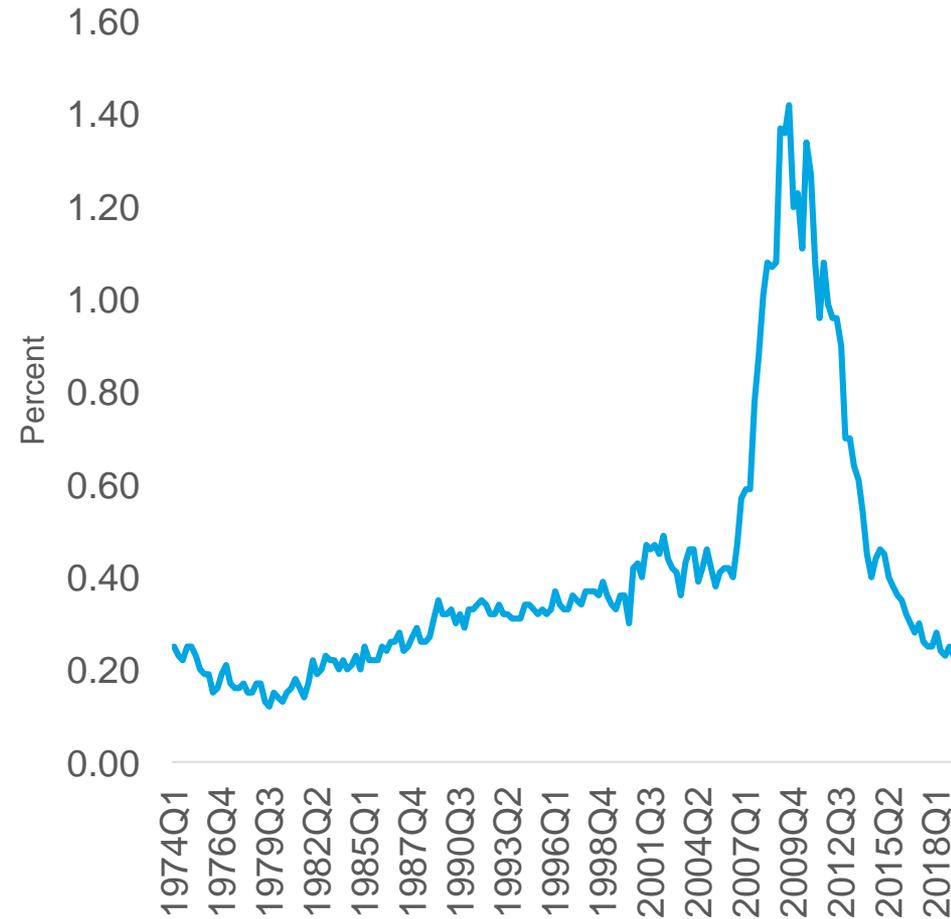
New Foreclosures Starts are at 30-Year Lows



Serious Delinquency Rate



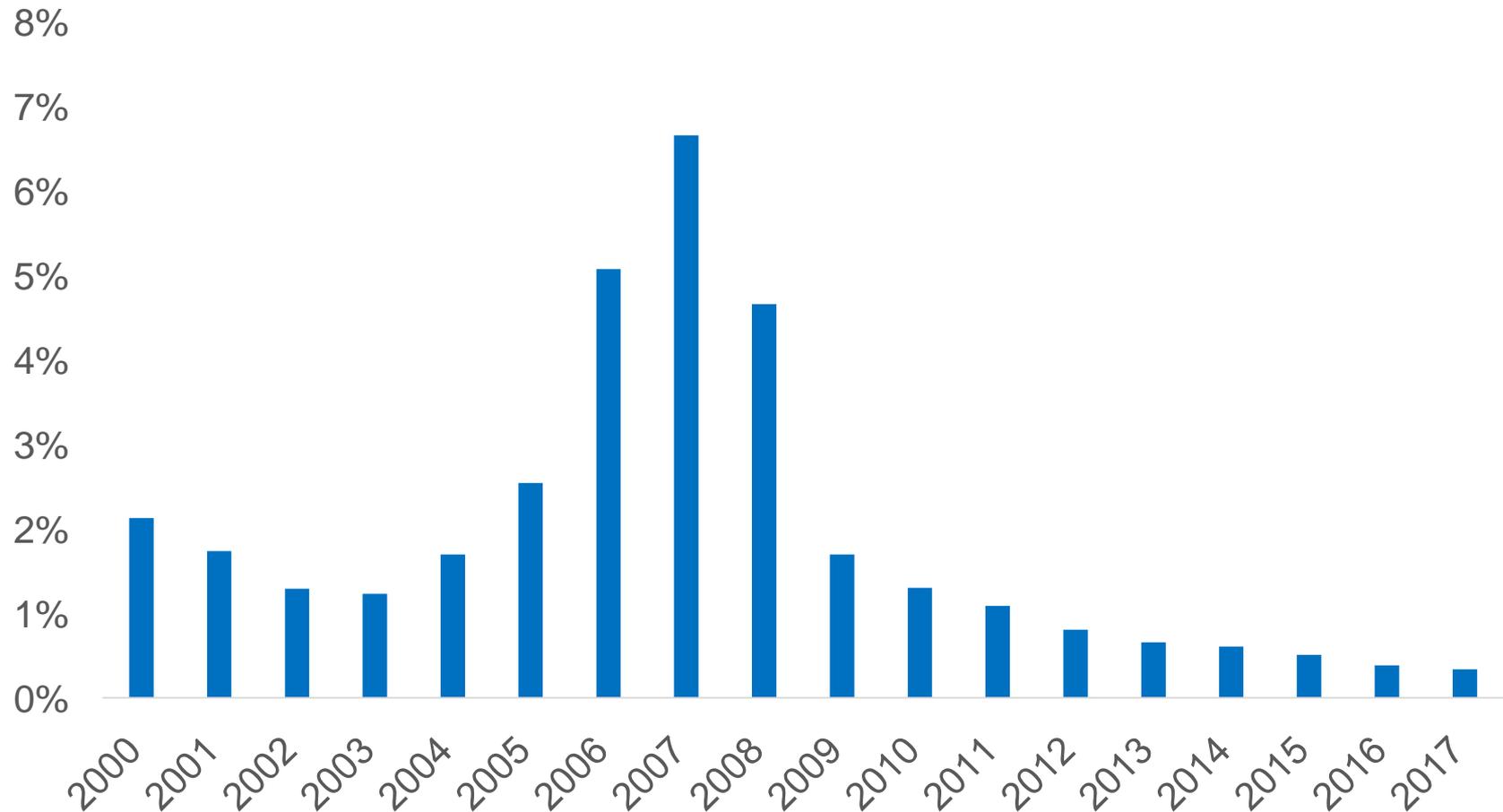
New Foreclosure Start Rate



Source: Freddie Mac and MBA

Mortgage Performance is Best in Two Decades

16 Month Serious Delinquency Rate by Vintage Year



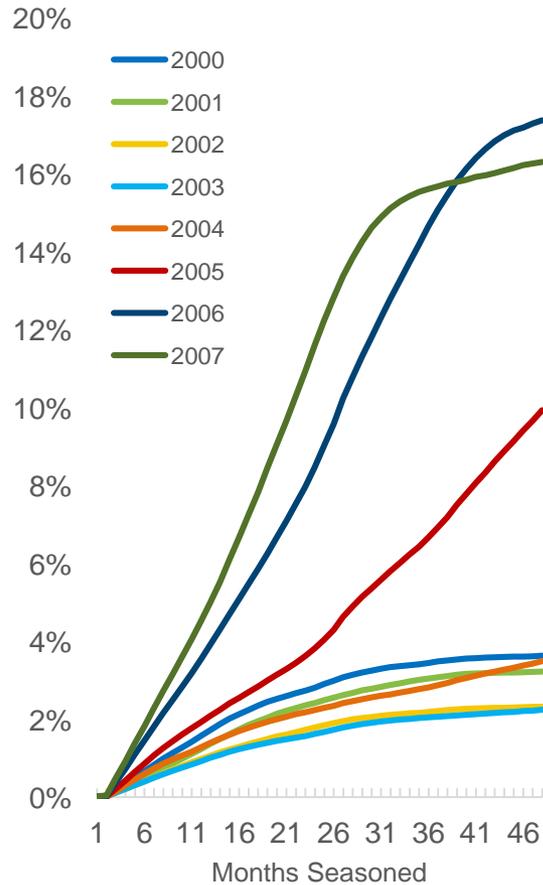
Source: CoreLogic, purchase loans only.

Recent Vintages Performing Well

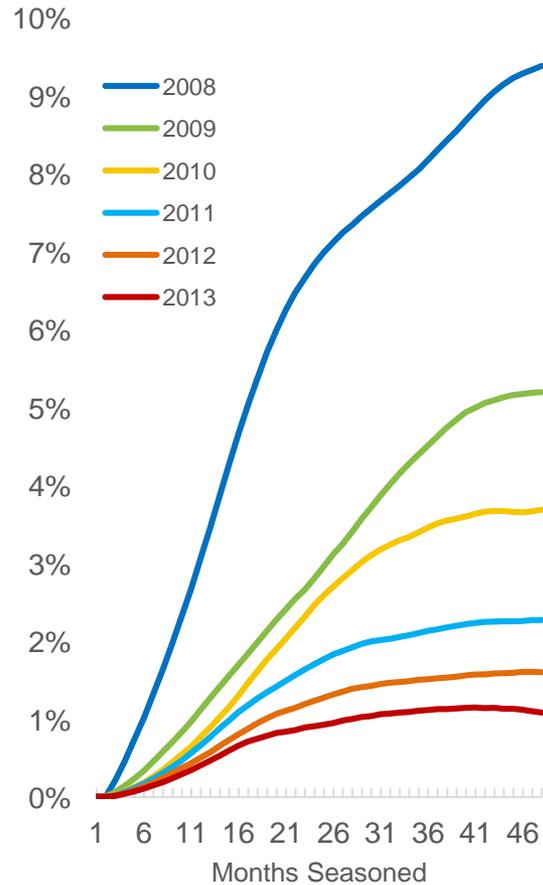
Serious Delinquency Rate by Vintage Year



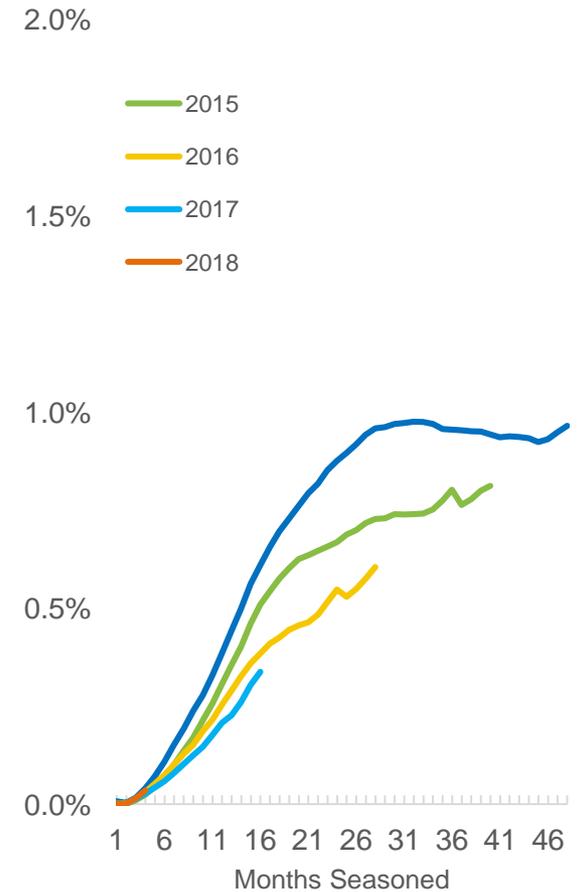
2000 to 2007



2008 to 2013



2014 to 2018

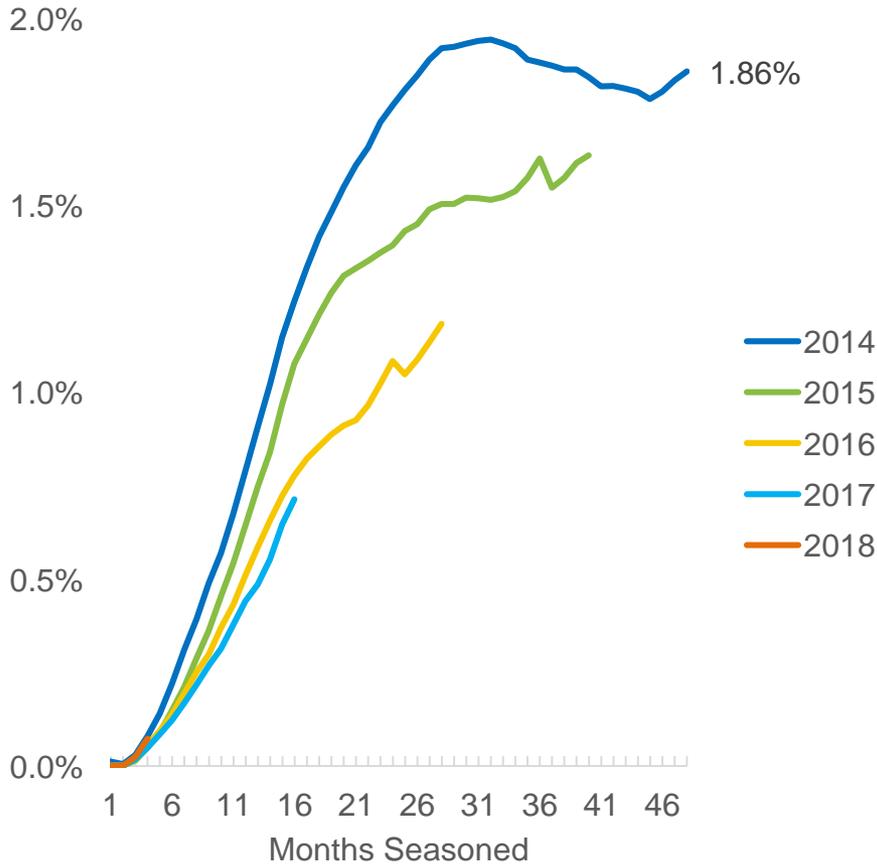


Source: CoreLogic, purchase loans only.

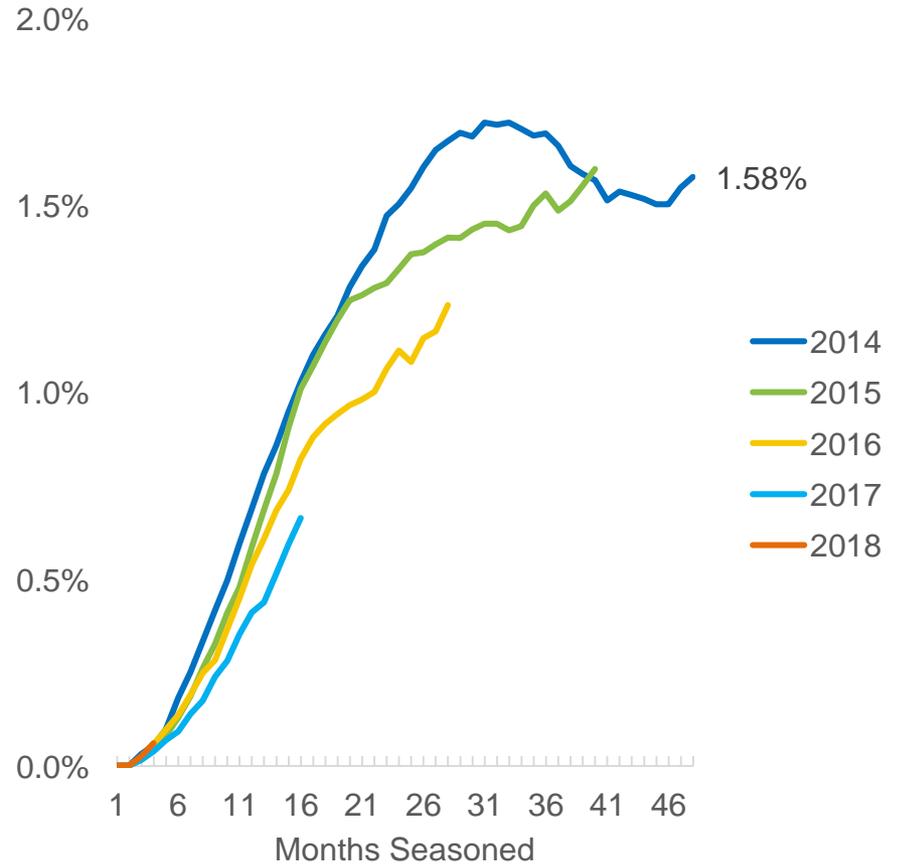
Mortgage Performance is Solid Even for Higher Risk Categories



95+ LTV



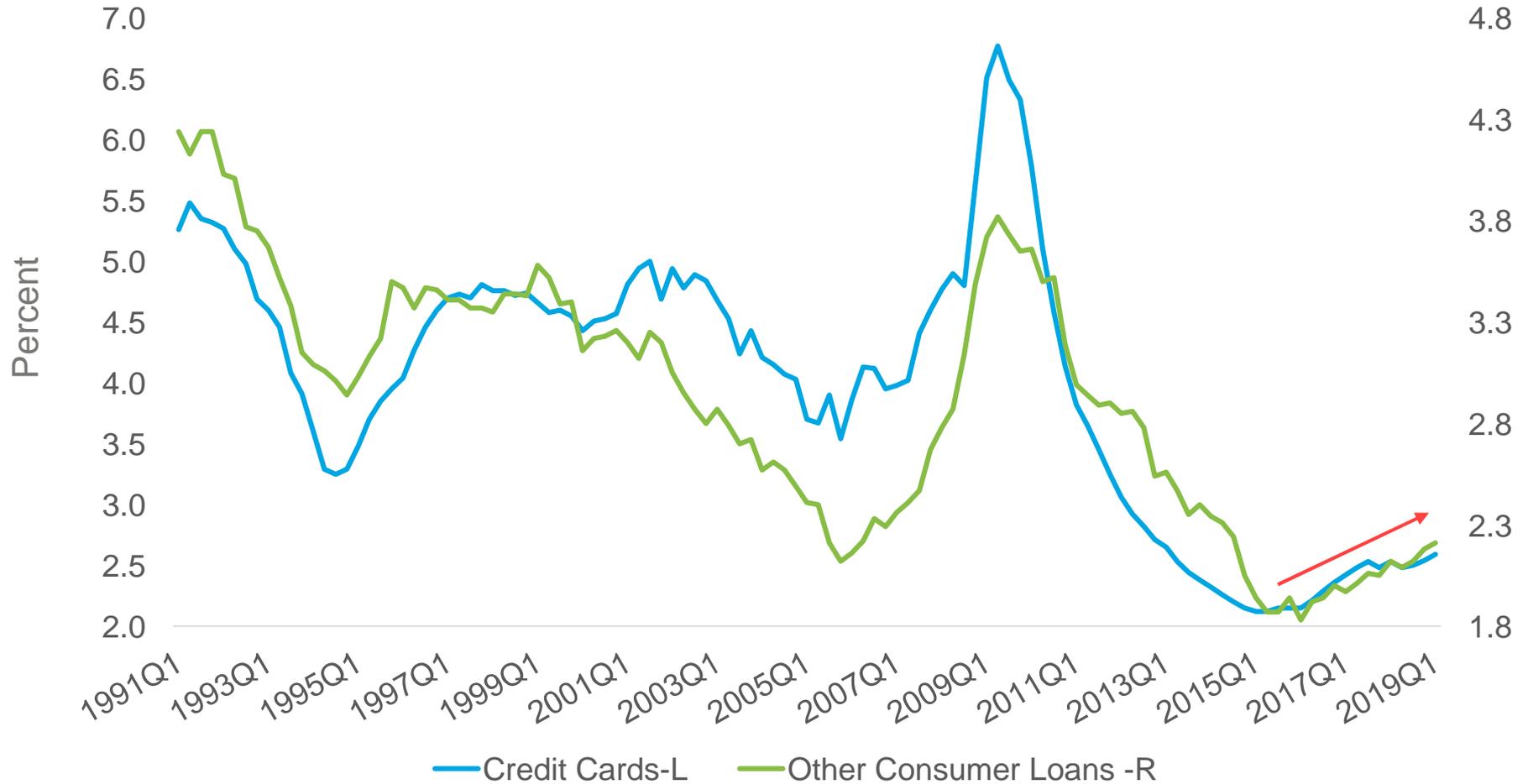
43+ DTI



Source: CoreLogic, purchase loans only.

Consumer Credit is Deteriorating...

Consumer Delinquency Rates

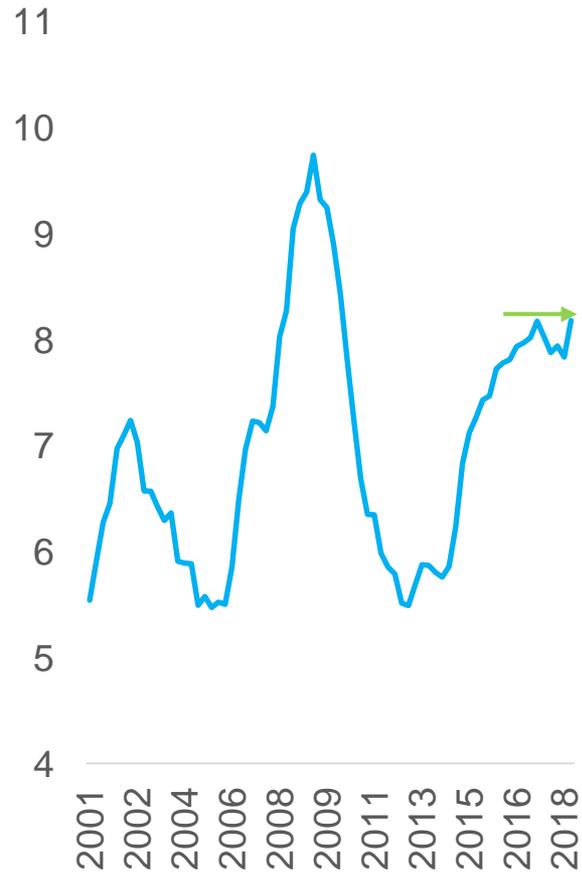


Source: Federal Reserve

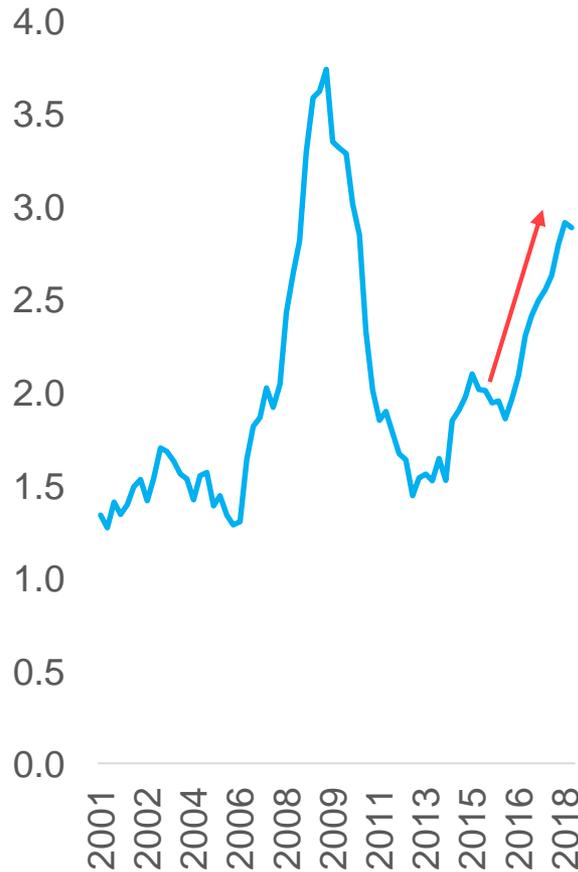
...Auto Loans Delinquency Transition Rates Are Rising Even for Middle Credit Borrowers



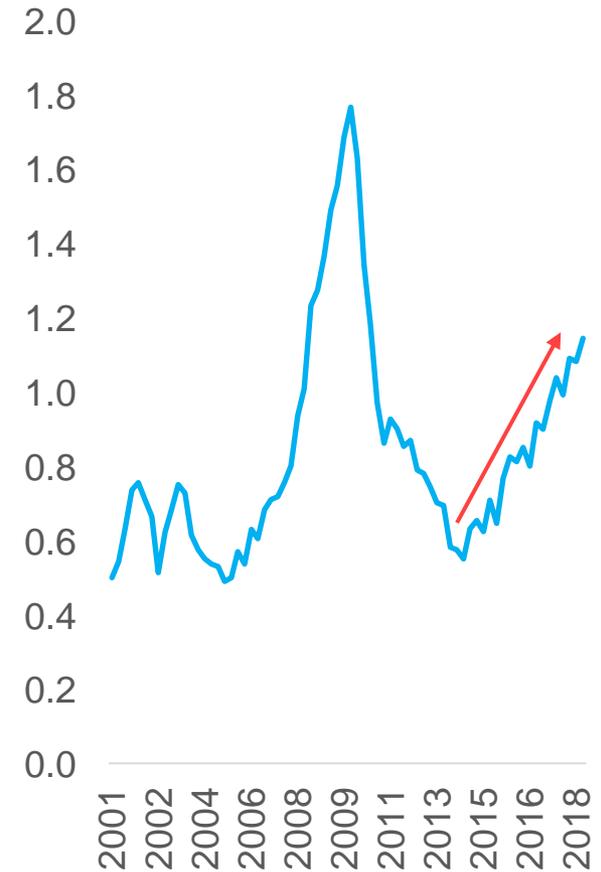
Low Credit Score Borrowers (< 620)



Modest Credit Score Borrowers (620 to 659)



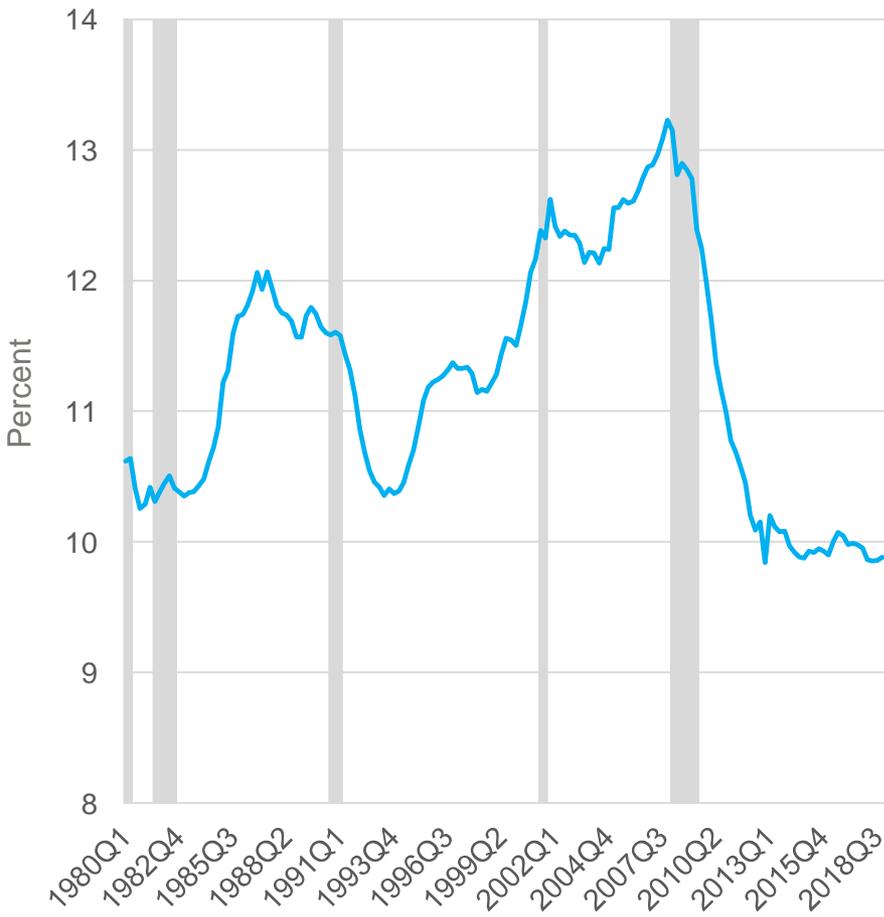
Lower/Average Credit Score Borrowers (660 to 719)



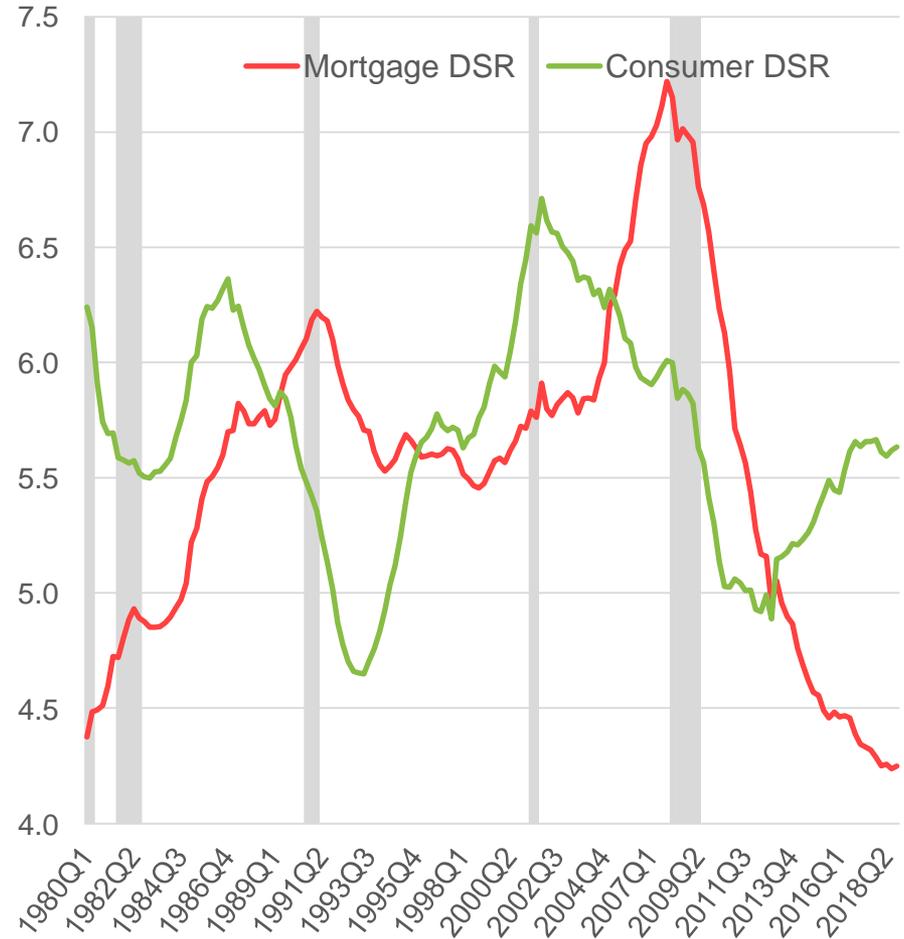
Source: NYFRB

Delinquencies are Rising Because Consumer Debt Service Ratios Are Rising

Even though Debt Service Ratio is Low...



...But it Masks Rise in Consumer Debt

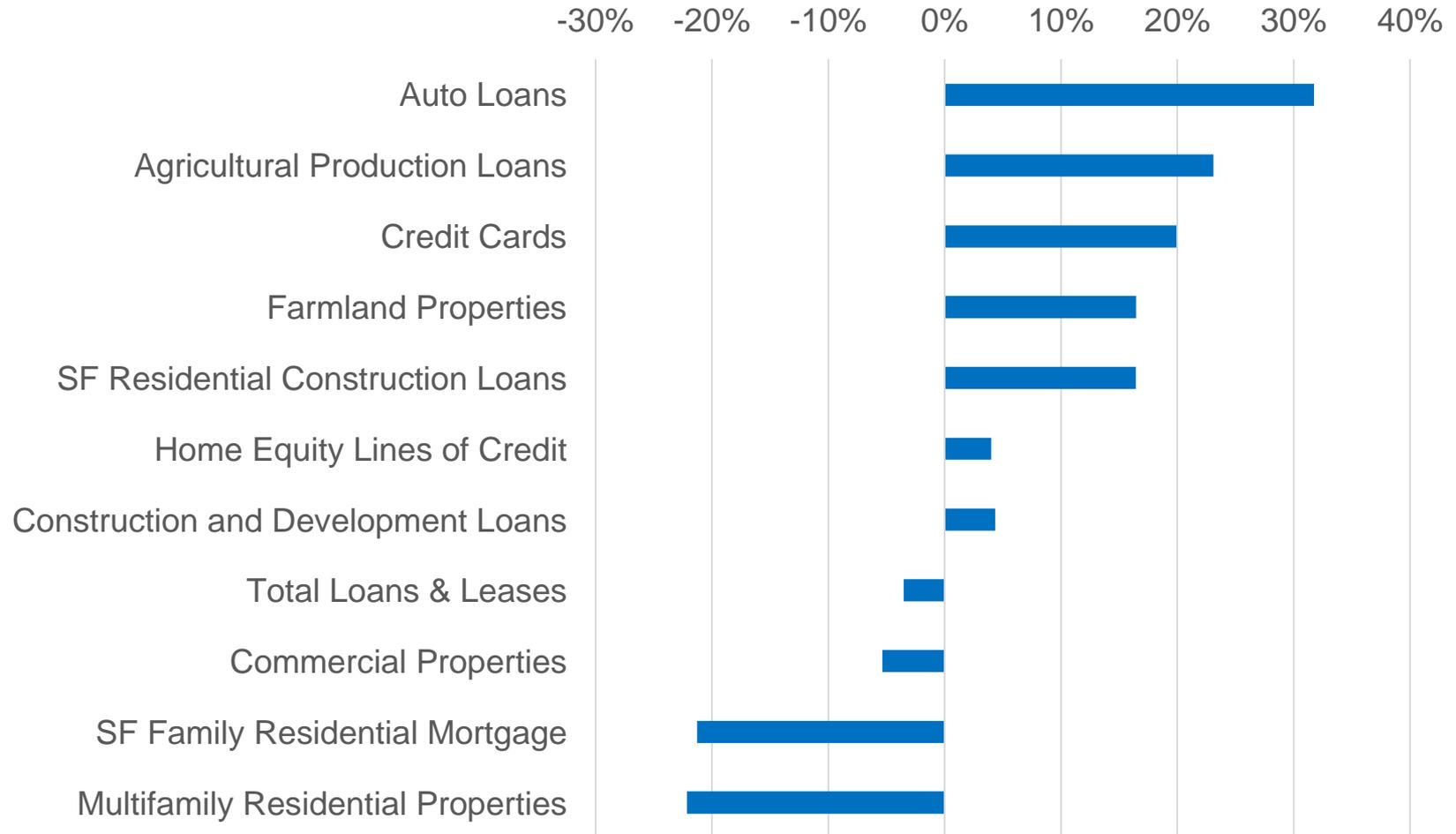


Source: Federal Reserve Board
Shaded areas indicate U.S. Recessions

Auto, Farm and Credit Cards Performance Deteriorated the Most Among Selected Bank Loan Segments



Q1 2016 to Q1 2019 Pct Change in 30 to 89 Past Due Rate



Source: FDIC

The End!

@TheSamKhater

Economic & Housing Research: www.freddiemac.com/research