

Housing Rebound of 2019

HBA of Greater Chattanooga
December 4th, 2019

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Housing Markets Showing Gradual Improvement



Regional and local population, job and home price grow



GDP, labor markets, and monetary policy/interest rates



Housing demand, homeownership trends, and affordability



Supply-side factors (labor shortage, lots, AD&C loans, reg burdens)



Housing rebound of 2019



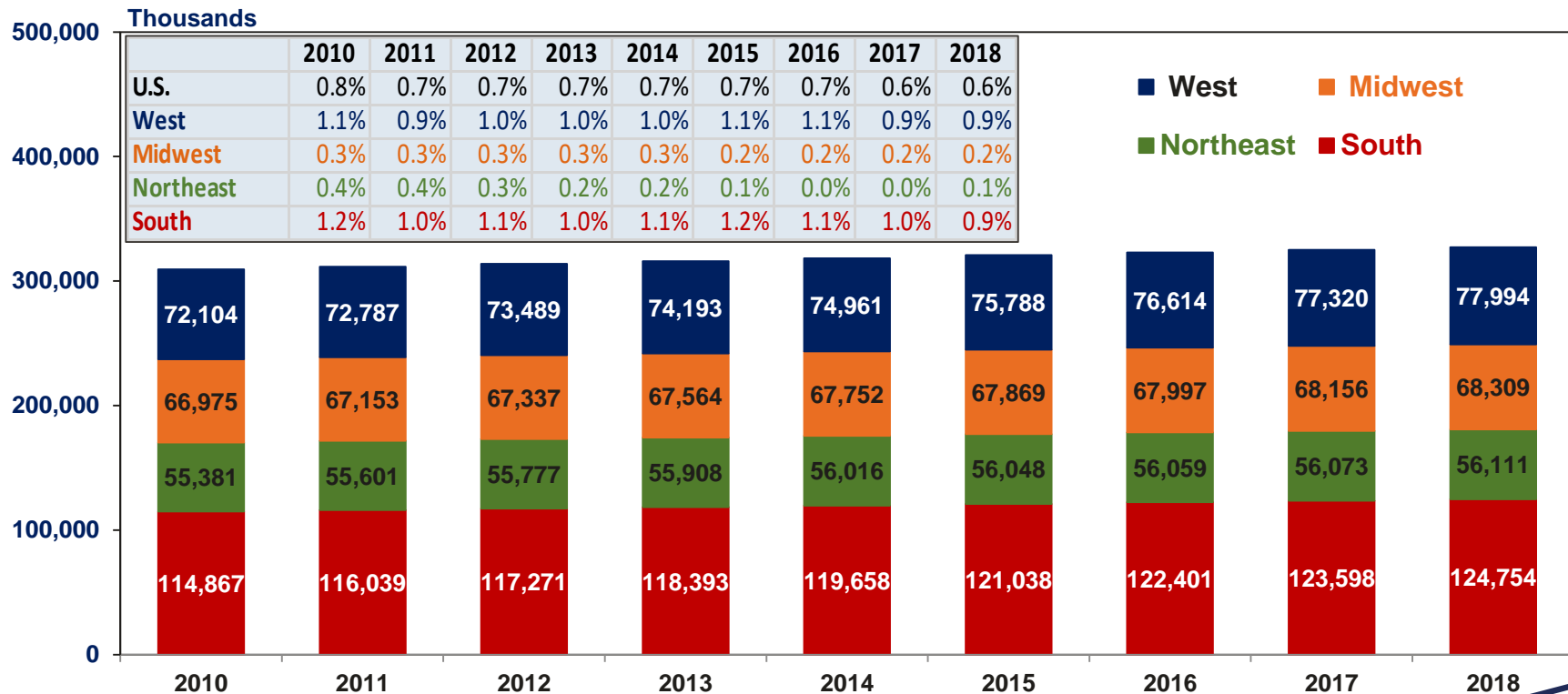
Single-family forecast and trends



Multifamily and remodeling outlook

Population Growth

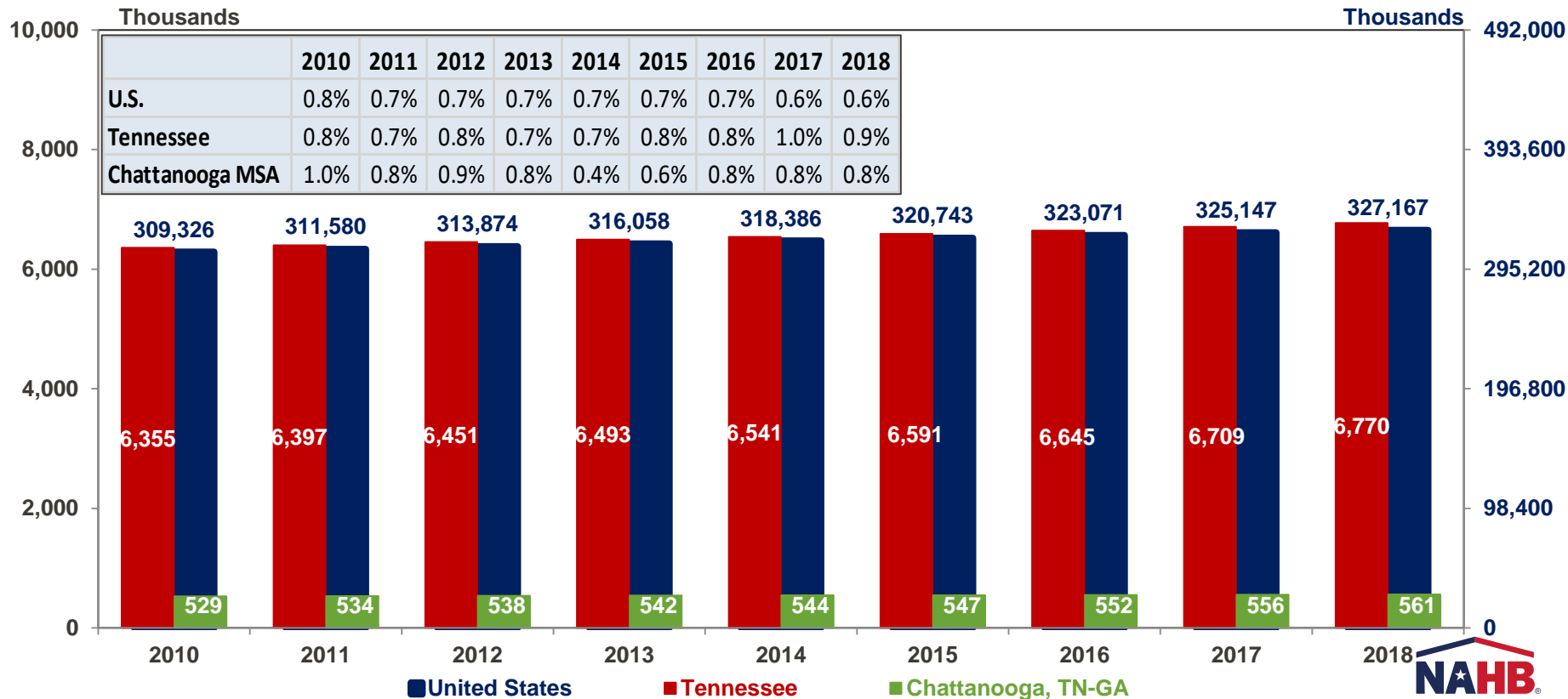
Population growth slowing in all regions



Source: U.S. Census Bureau (BOC)

Population Growth

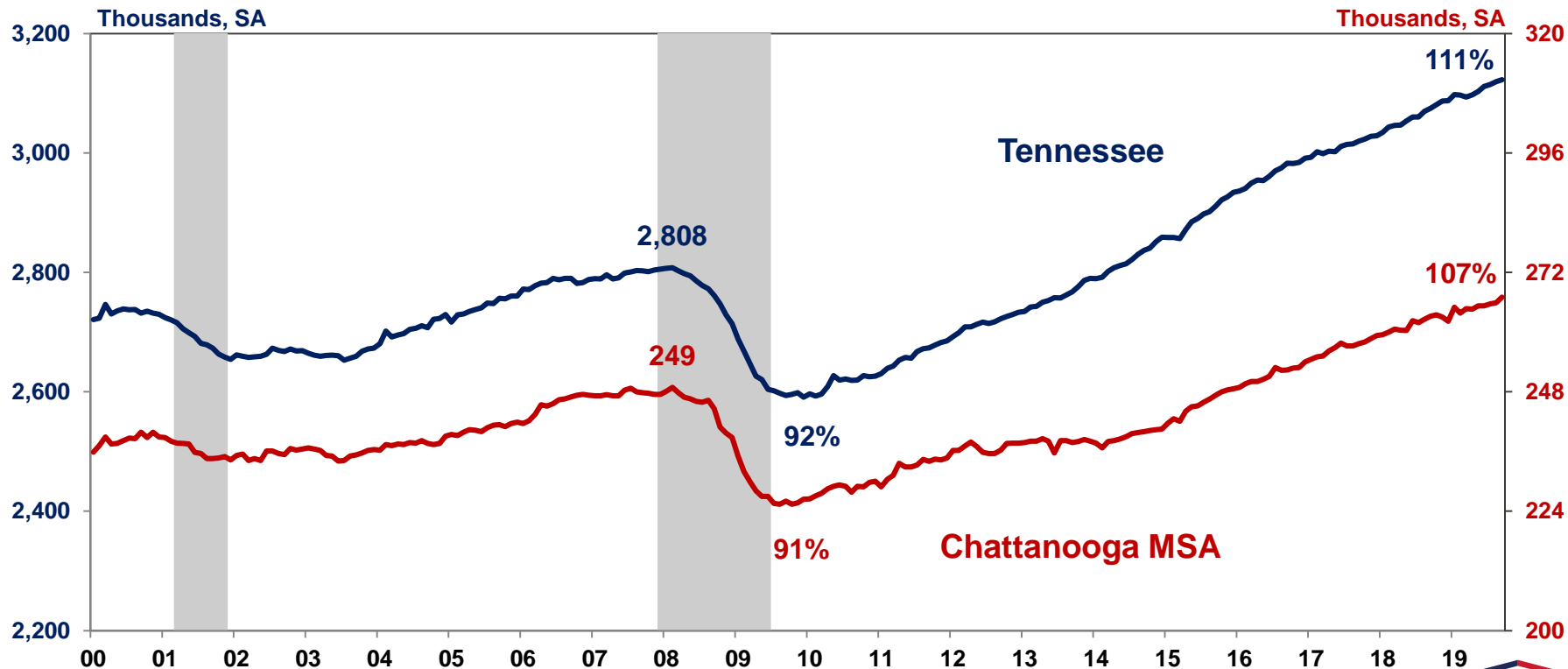
Chattanooga MSA population growing faster than national rates but slower than state rates



Source: U.S. Census Bureau (BOC)

Payroll Employment

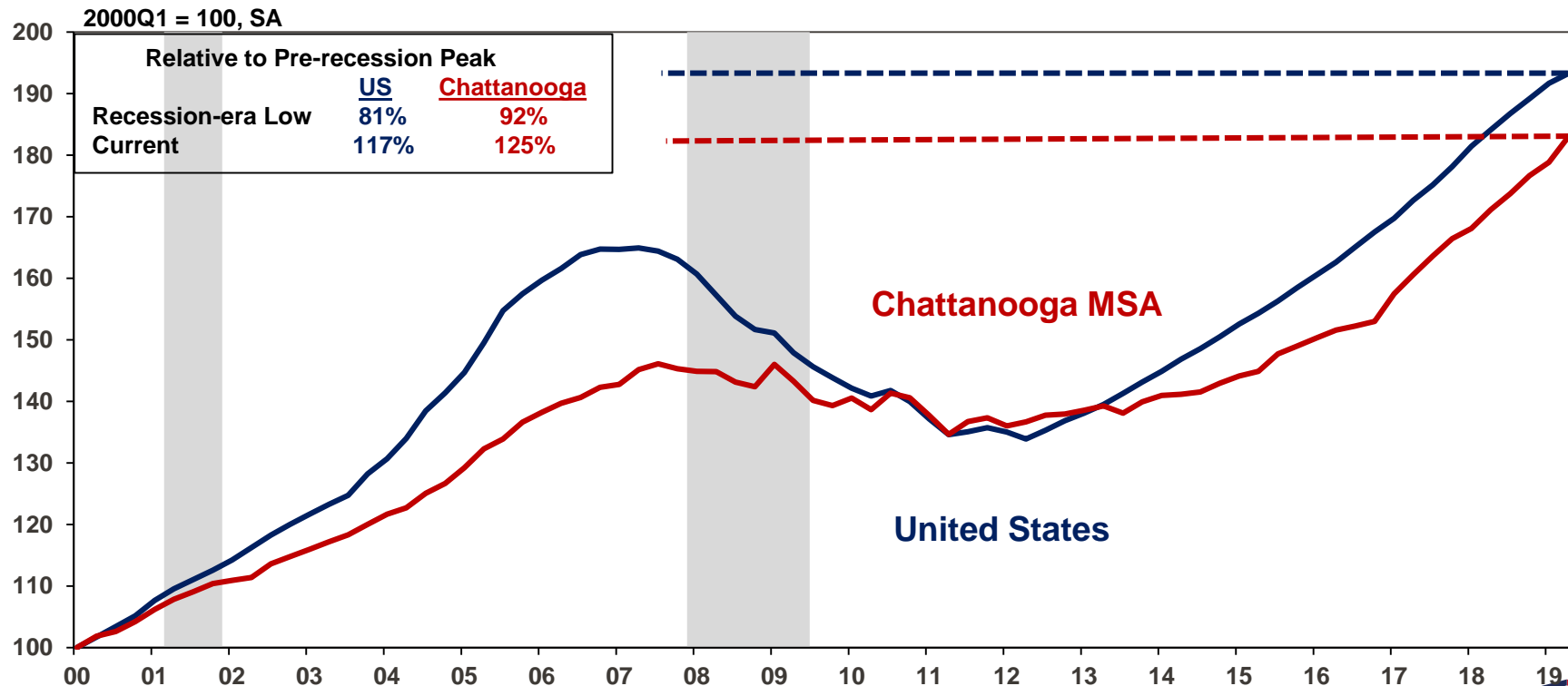
Chattanooga MSA above the pre-recession peak



Source: U.S. Bureau of Labor Statistics (BLS)

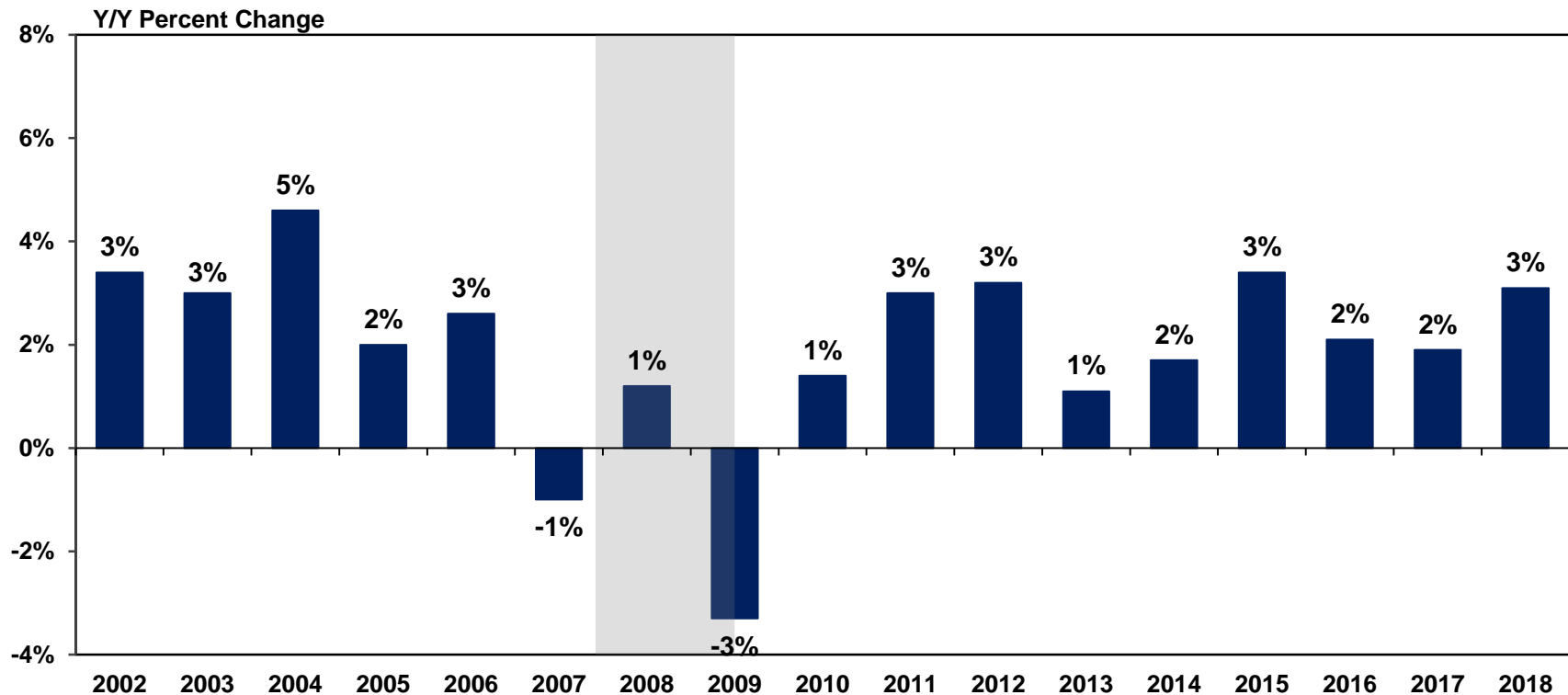
Existing House Price Index

Chattanooga MSA above the pre-recession peak



Source: U.S. Federal Housing Finance Agency (FHFA)

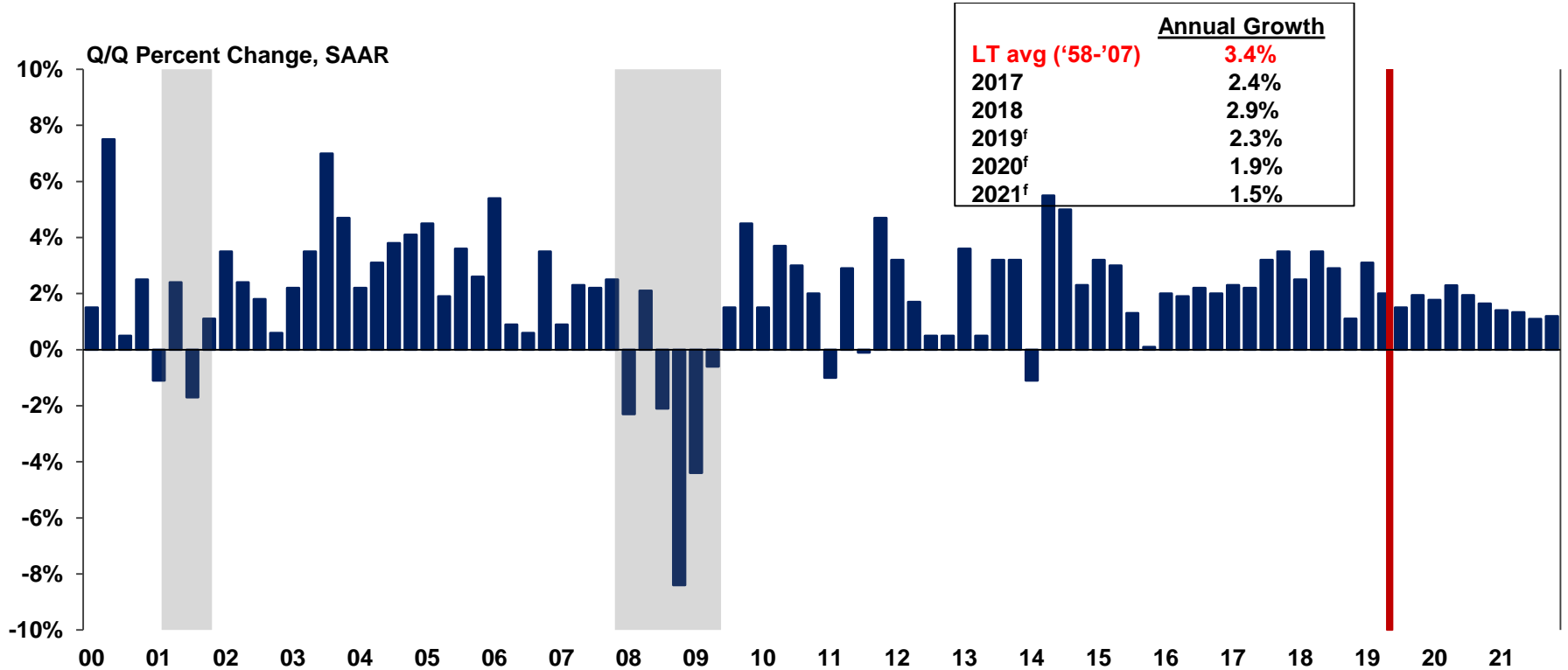
Real GDP Growth in Tennessee



Source: U.S. Bureau of Economic Analysis (BEA)

GDP Growth

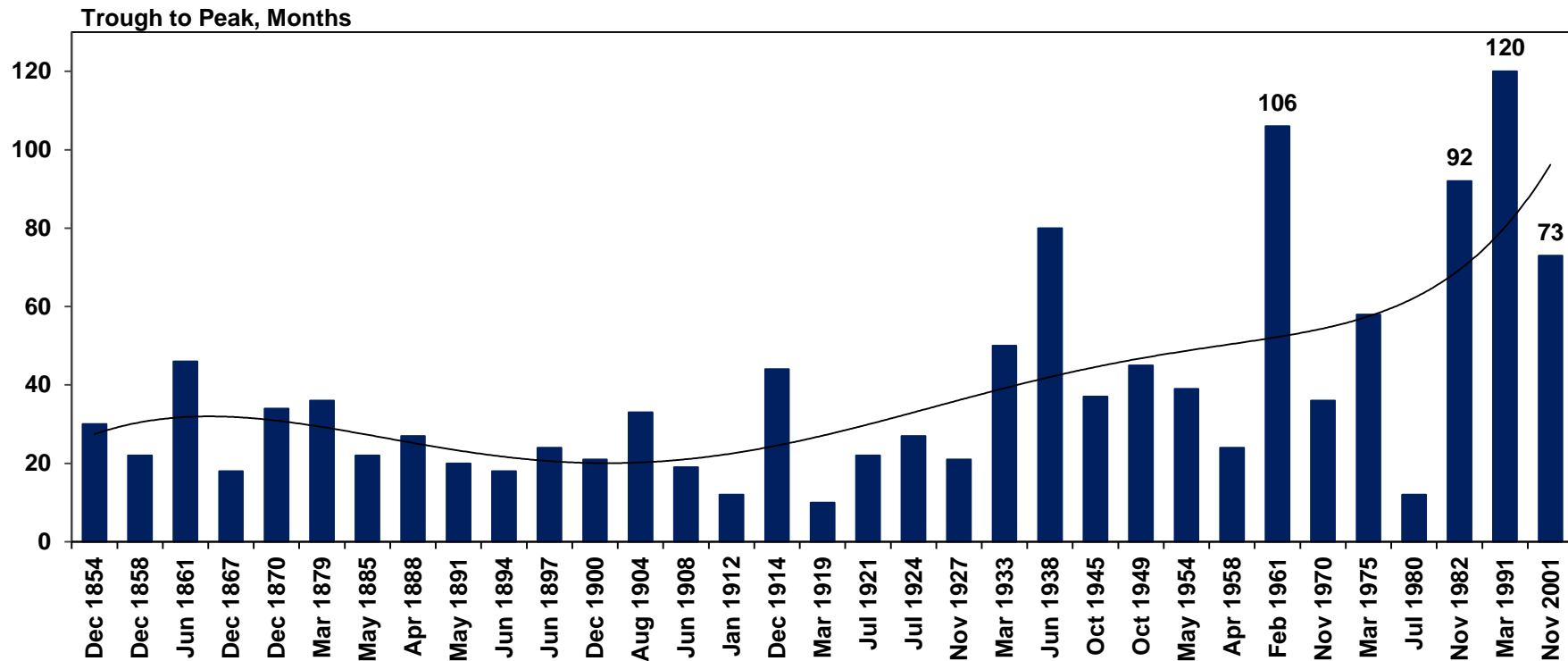
Economy is slowing after strong 1Q19



Source: U.S. Bureau of Economic Analysis (BEA) and NAHB forecast.

Expansion is Aging

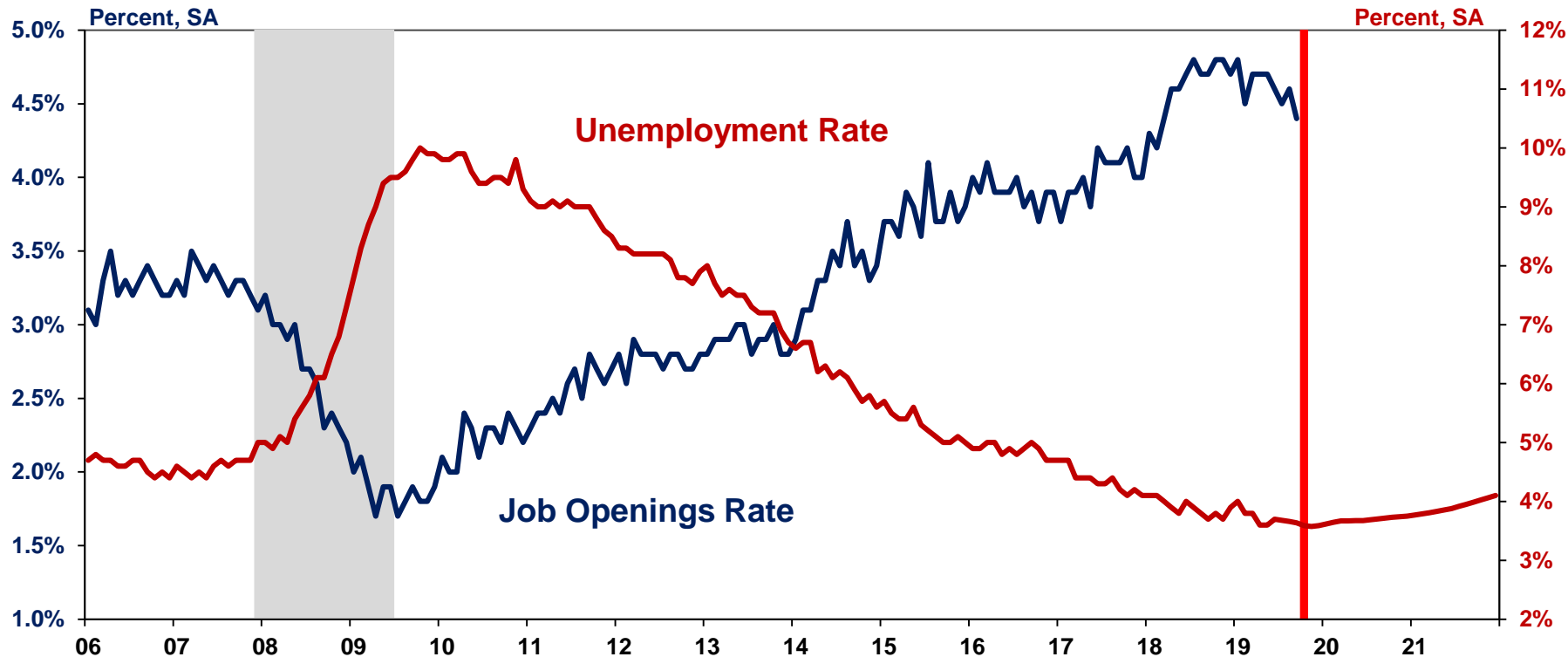
Current expansion is 127 months old



Source: National Bureau of Economic Research (NBER)

Tight Labor Market

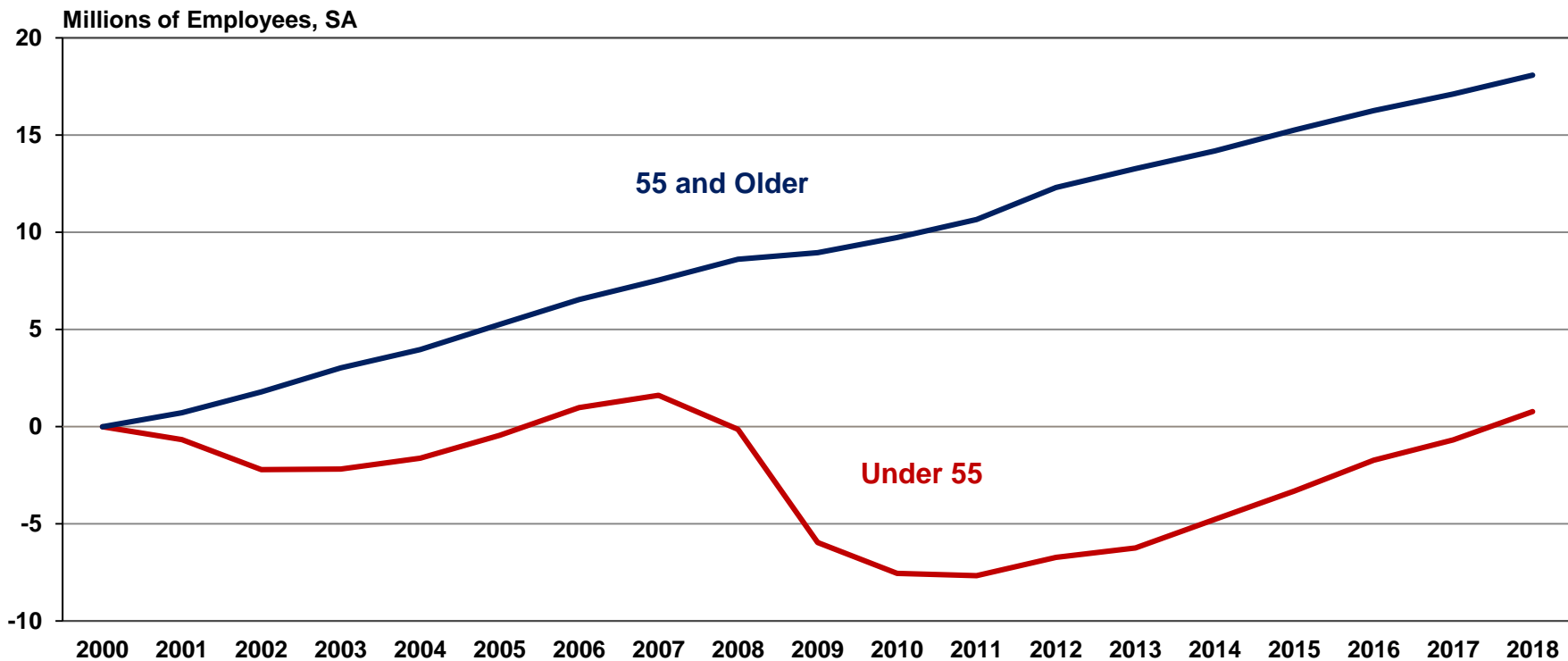
Lack of labor represents a macro risk



Source: U.S. Bureau of Labor Statistics (BLS) and NAHB forecast

Cumulative Change in Employment by Age Group

Mind the Gen-X gap

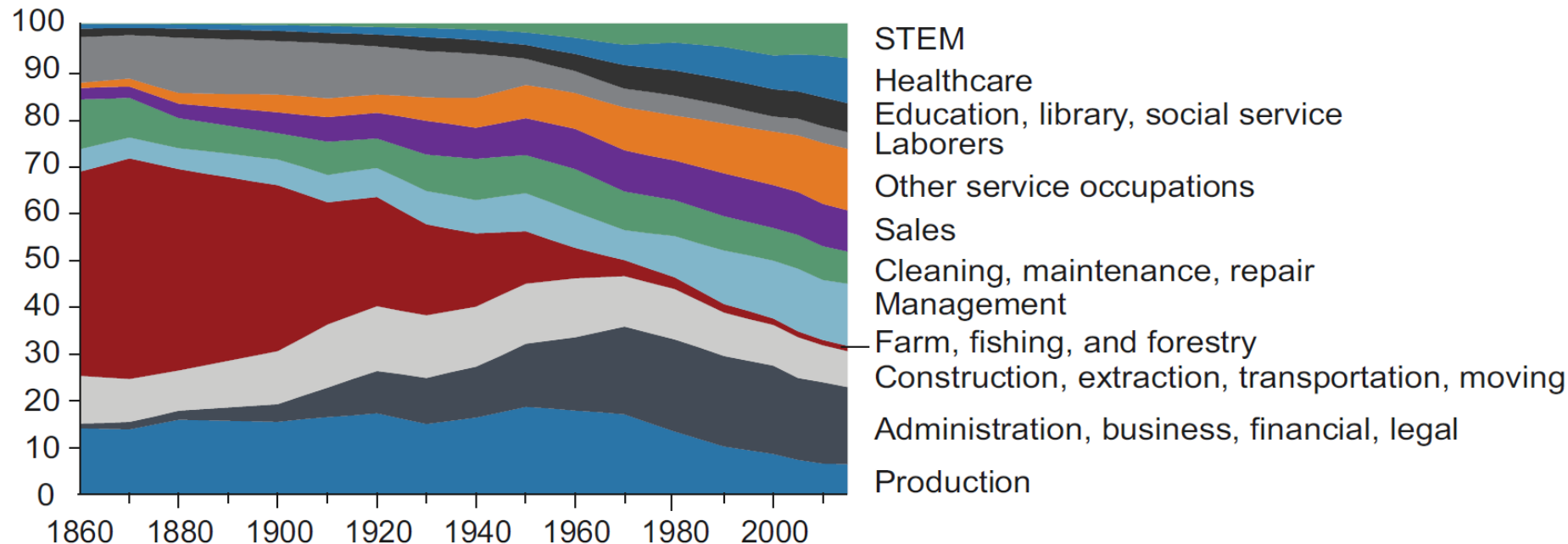


Source: U.S. Bureau of Labor Statistics (BLS)

Occupational Group Employment Share by Year

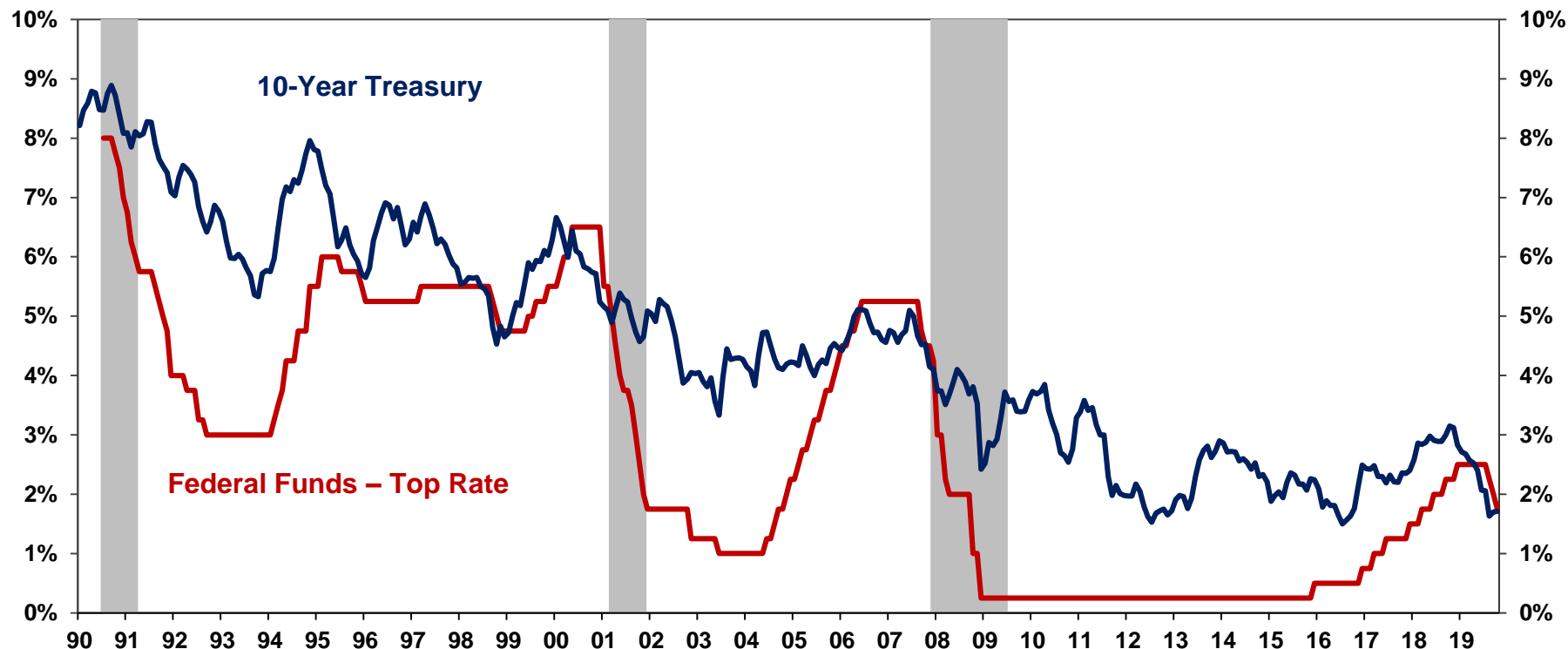
Construction share has remained stable since the Civil War

Employment share



Source: Joel A. Elvery, "Changes in the Occupational Structure of the United States: 1860 to 2015", Economic Commentary, Number 2019-09.
<https://www.clevelandfed.org/en/newsroom-and-events/publications/economic-commentary/2019-economic-commentaries/ec-201909-changes-in-us-occupational-structure.aspx>

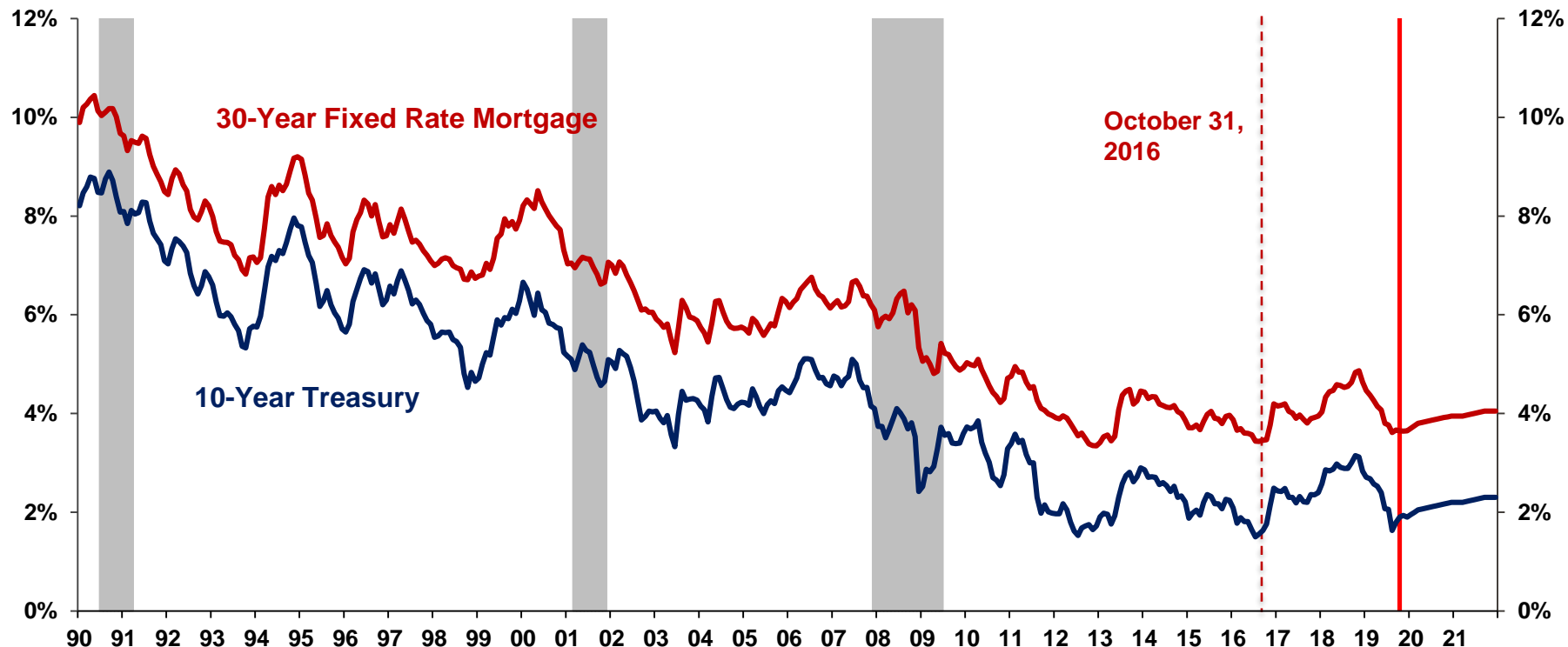
Fed Funds Rate



Source: U.S. Board of Governors of the Federal Reserve System (FRB)

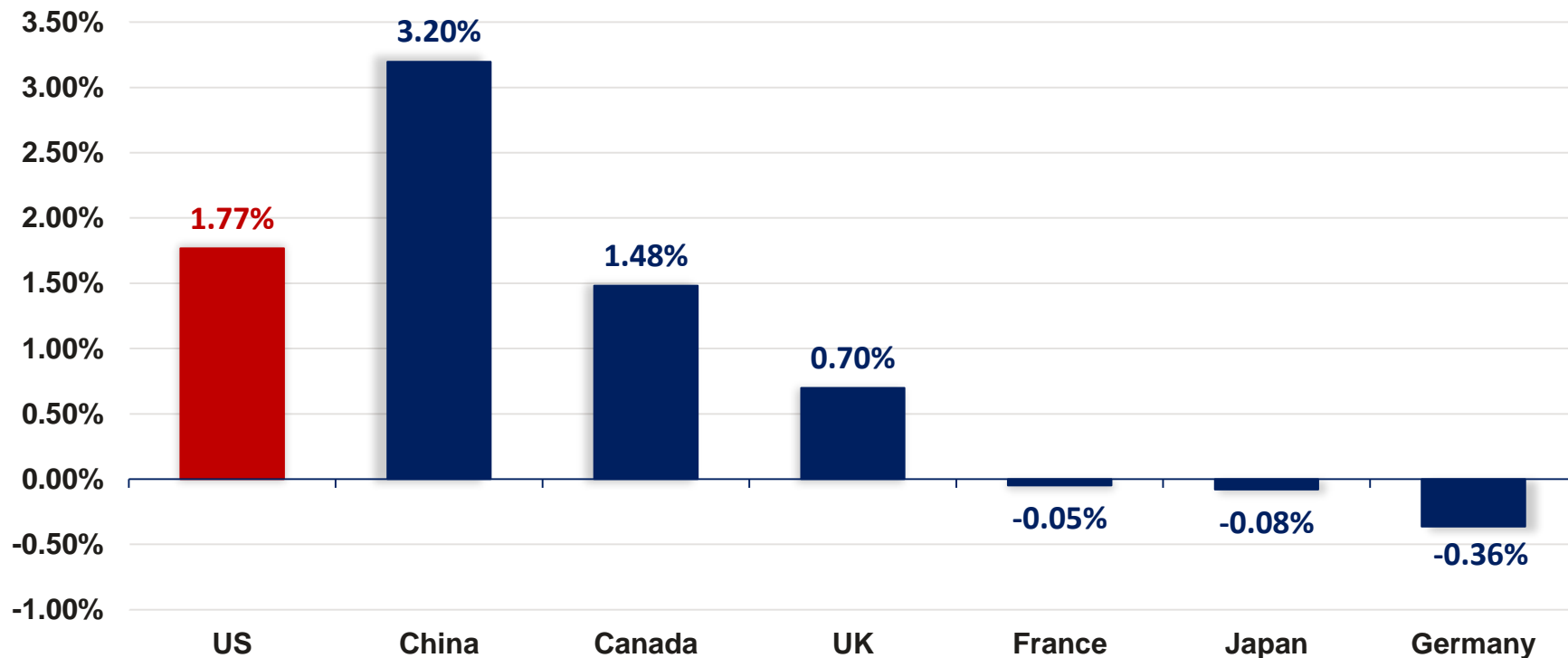
30-Year Fixed Rate Mortgage and 10-Year Treasury

Interest rate declines amidst trade concerns and economic slowing



Source: Federal Reserve and Freddie Mac data and NAHB forecast

10-Year Treasury Yield by Country



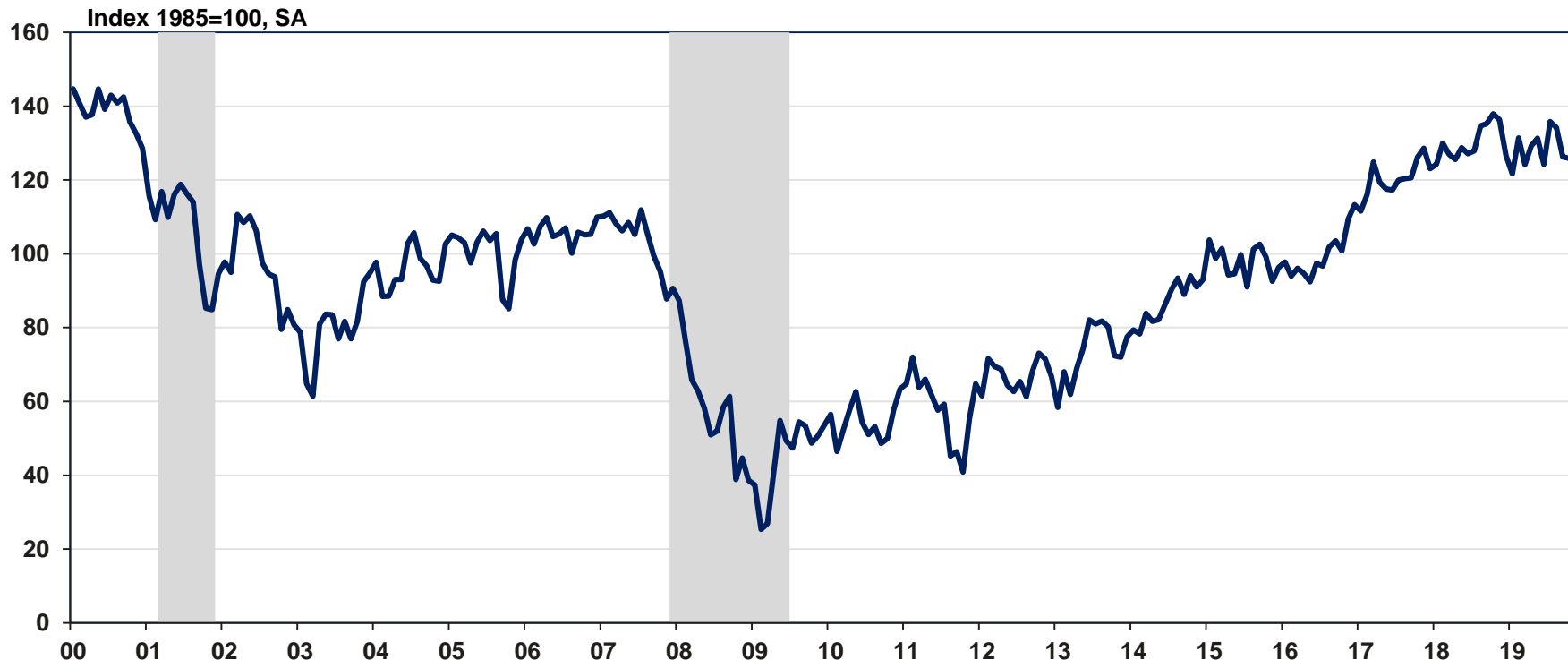
Source: www.investing.com; 10-year treasury rate on November 22, 2019



Housing Demand and Affordability

Consumer Confidence Leveling Off

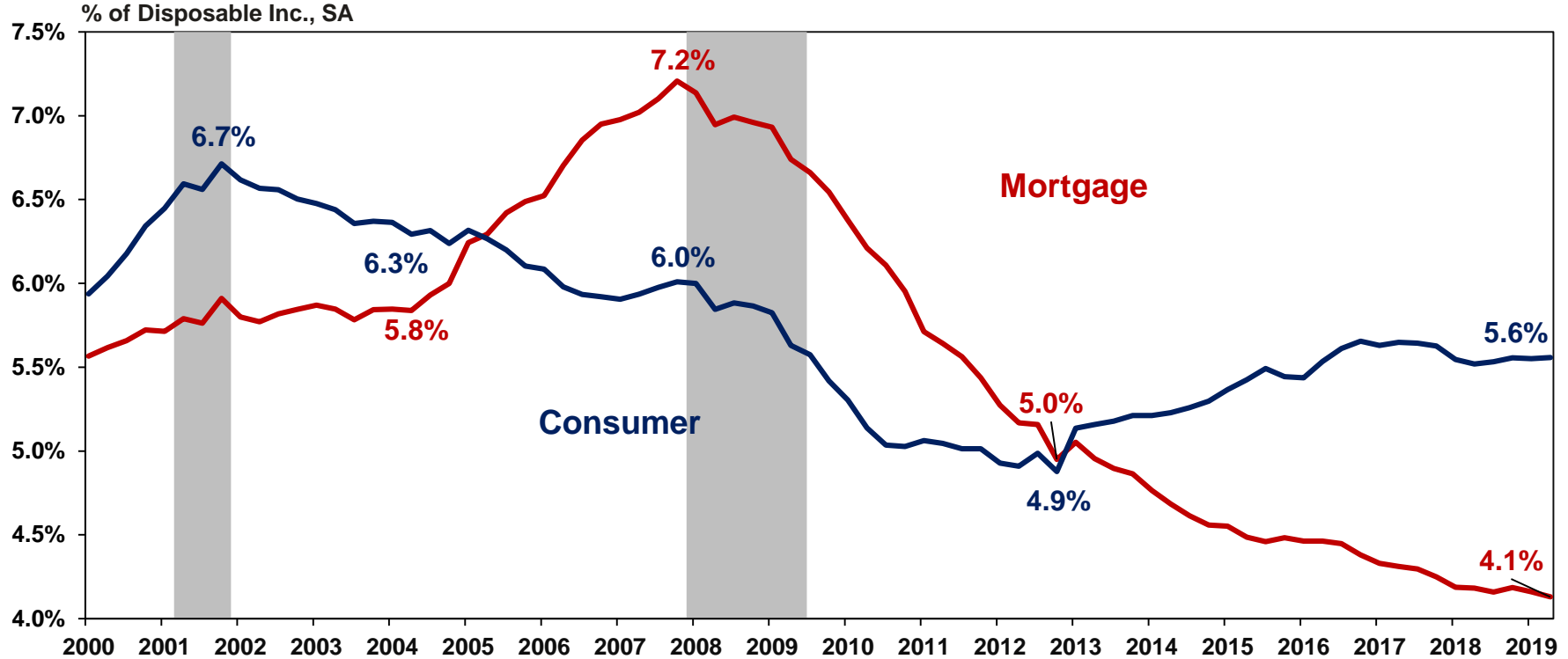
Near two-decade high but economic uncertainty took a toll at end of year



Source: The Conference Board

Household Balance Sheets

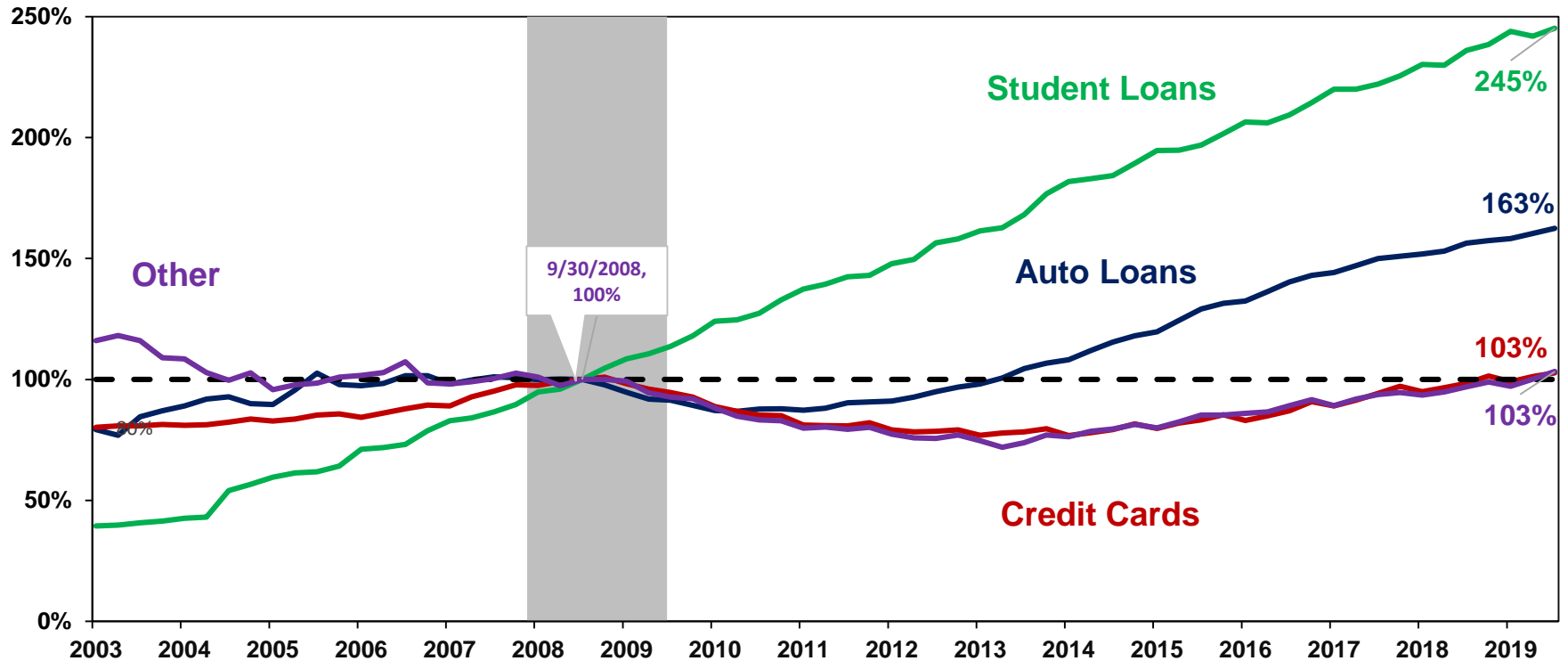
A shift in debt away from mortgages



Source: U.S. Board of Governors of the Federal Reserve System (FRB)

Consumer Debt

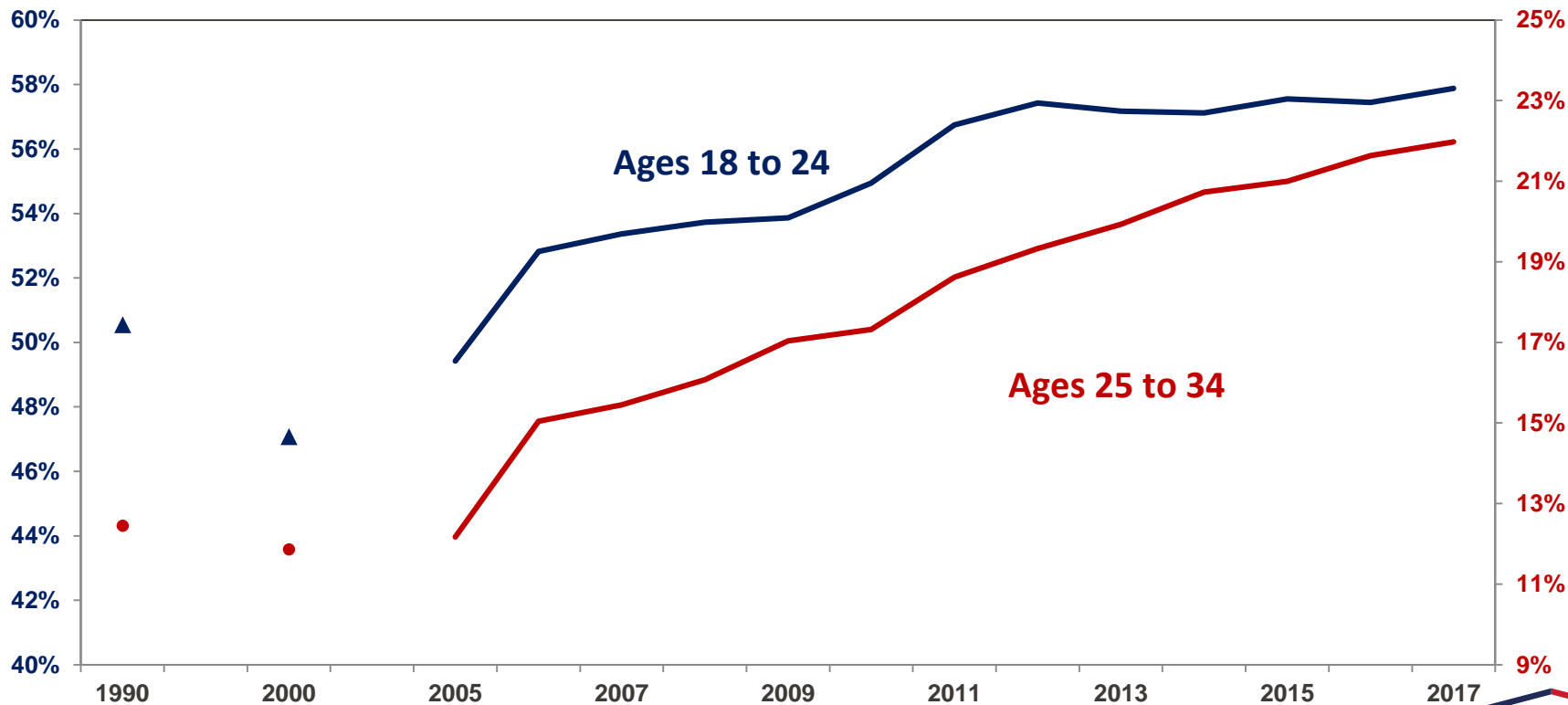
Rise in student and auto loans



Source: Federal Reserve Bank of New York

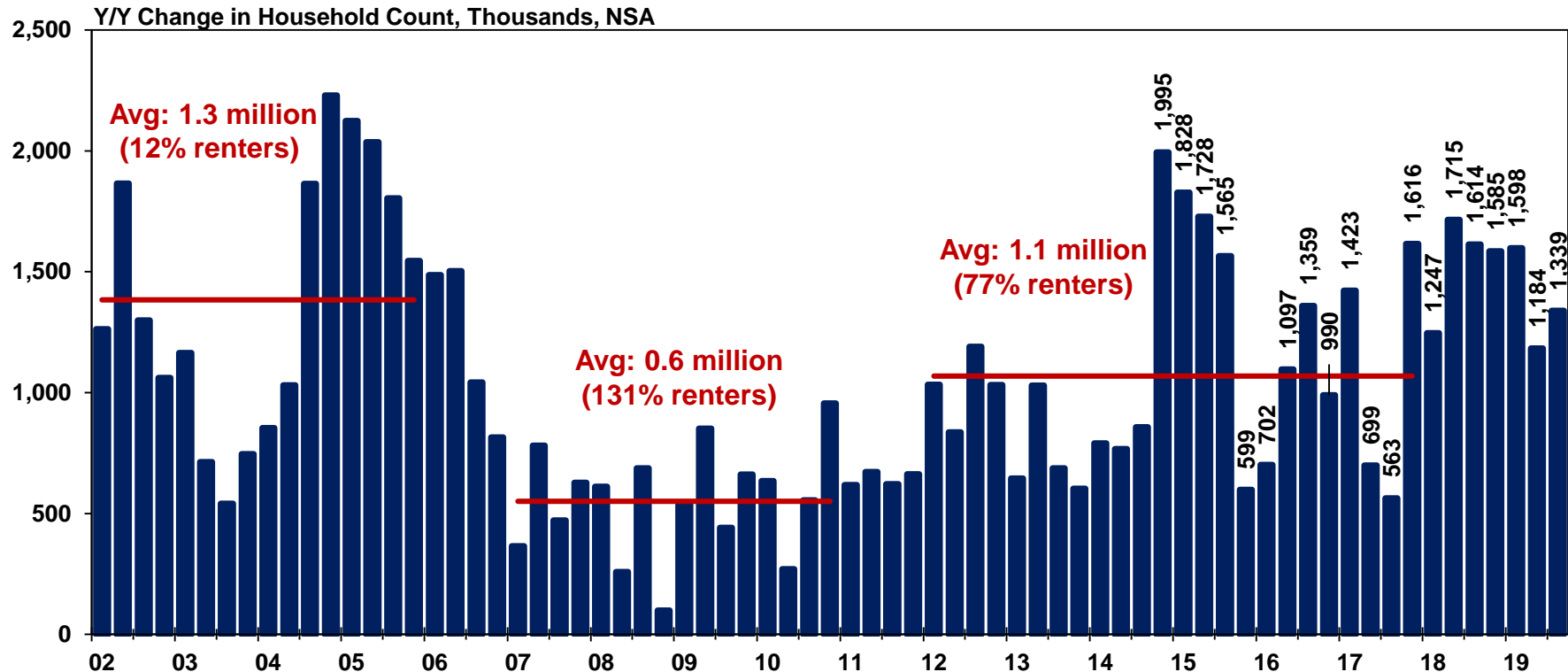
Share of Young Adults Living with Parents

Almost doubled



Source: US Census 1990, 2000, PUMS, 2000-2017 ACS, PUMS, and NAHB Estimates

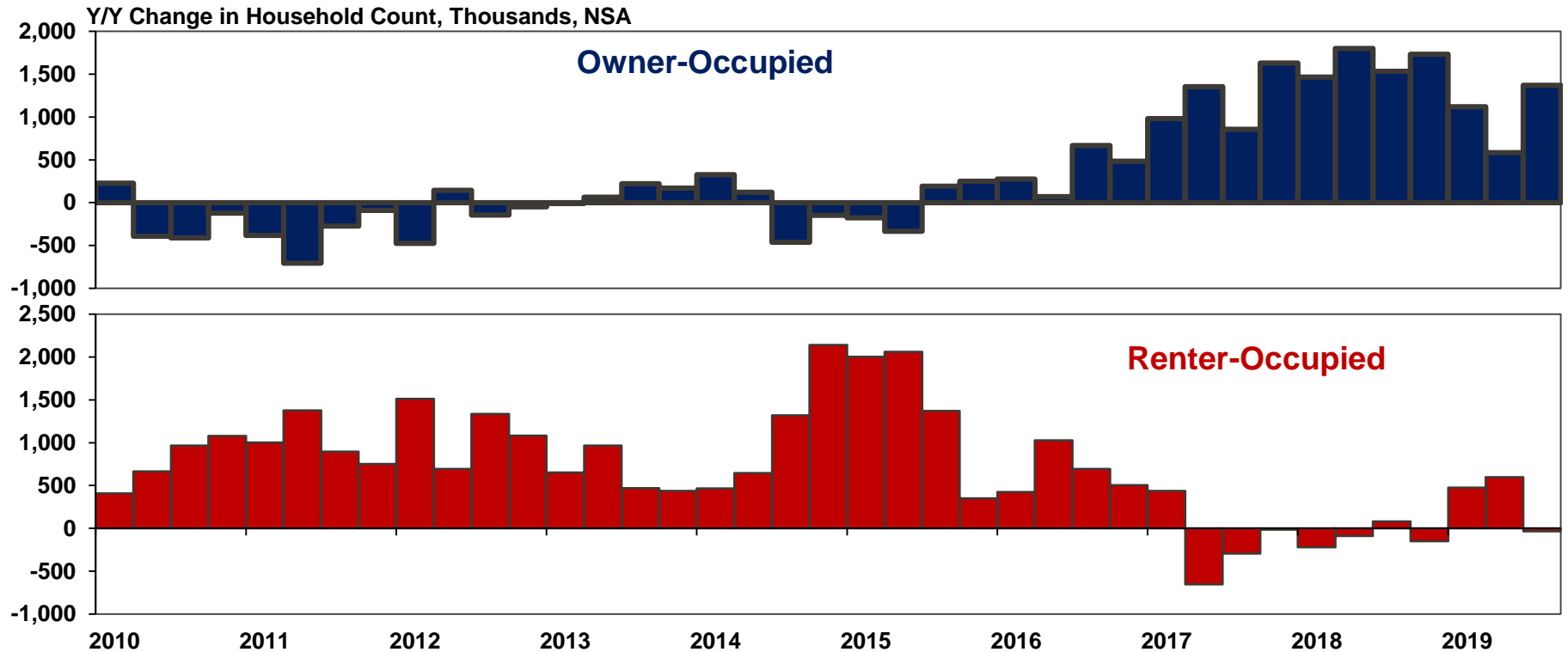
Household Formation



Source: U.S. Census Bureau (BOC): Housing Vacancies & Homeownership Rates

Household Formation

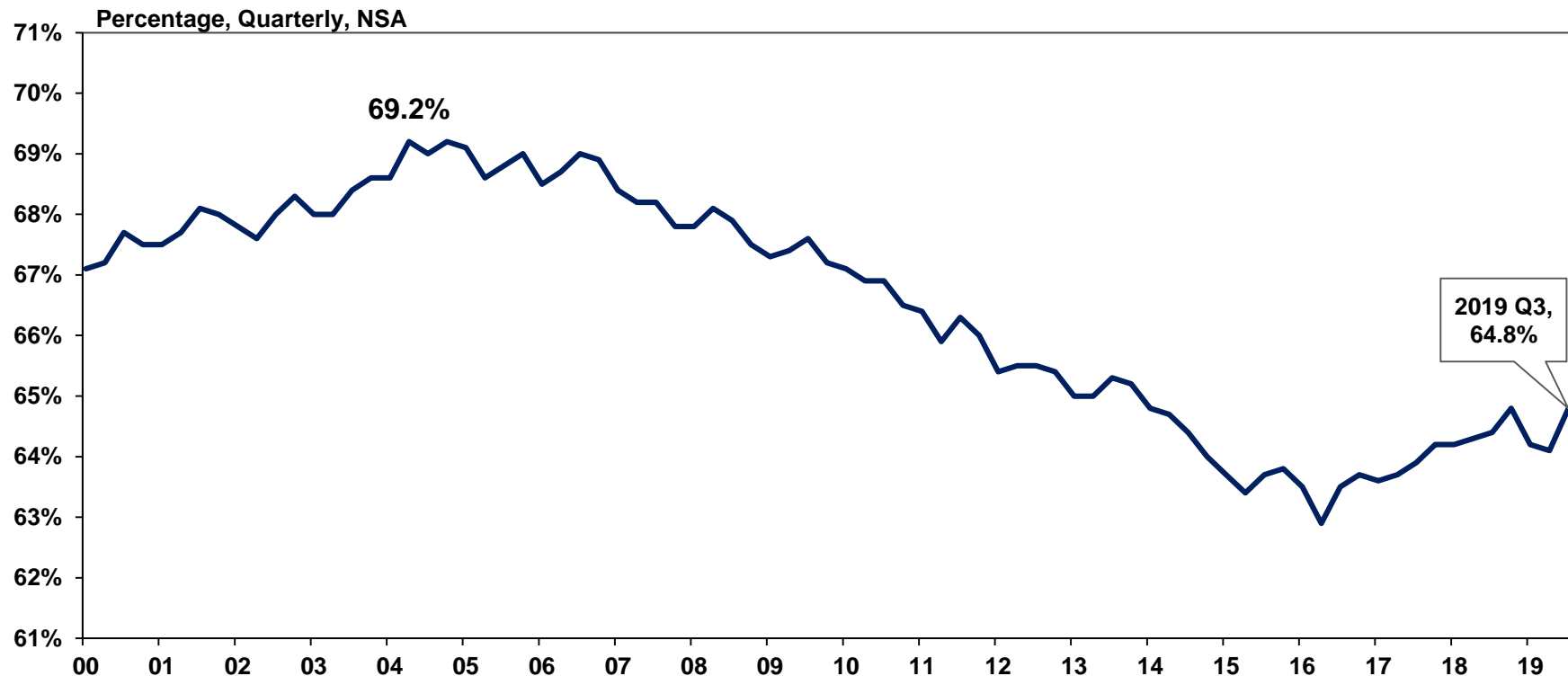
Strong demand for home ownership in Q3 2019



Source: U.S. Census Bureau (BOC): Housing Vacancies & Homeownership

Homeownership Rate

Bounced back after two declines

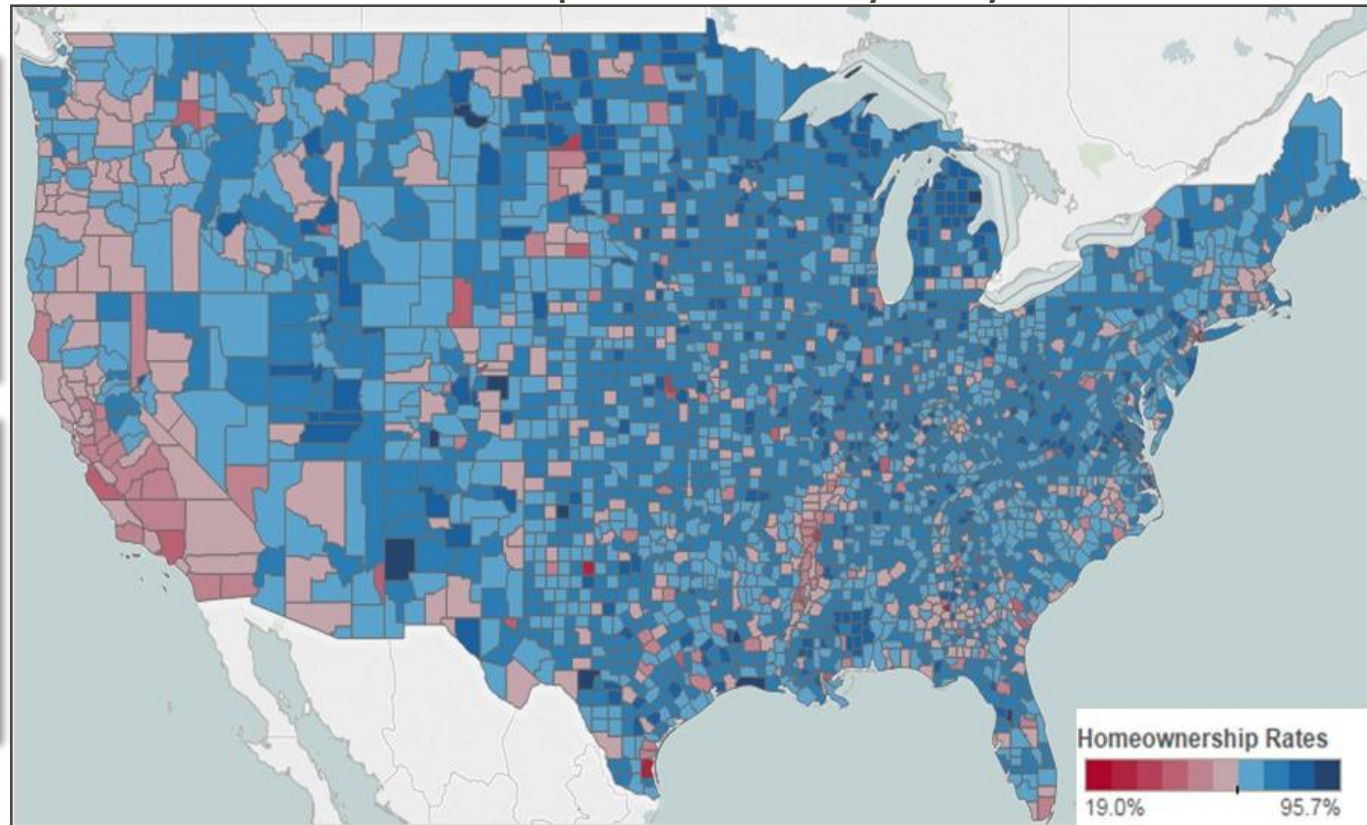
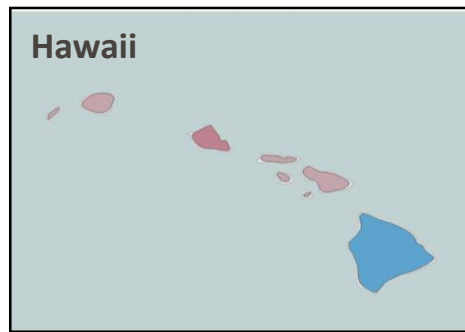
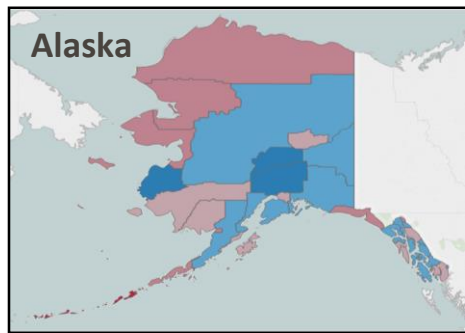


Source: U.S. Census Bureau (BOC): Housing Vacancies & Homeownership

Geography of Homeownership

Homeownership rate for Chattanooga MSA is 67.6%

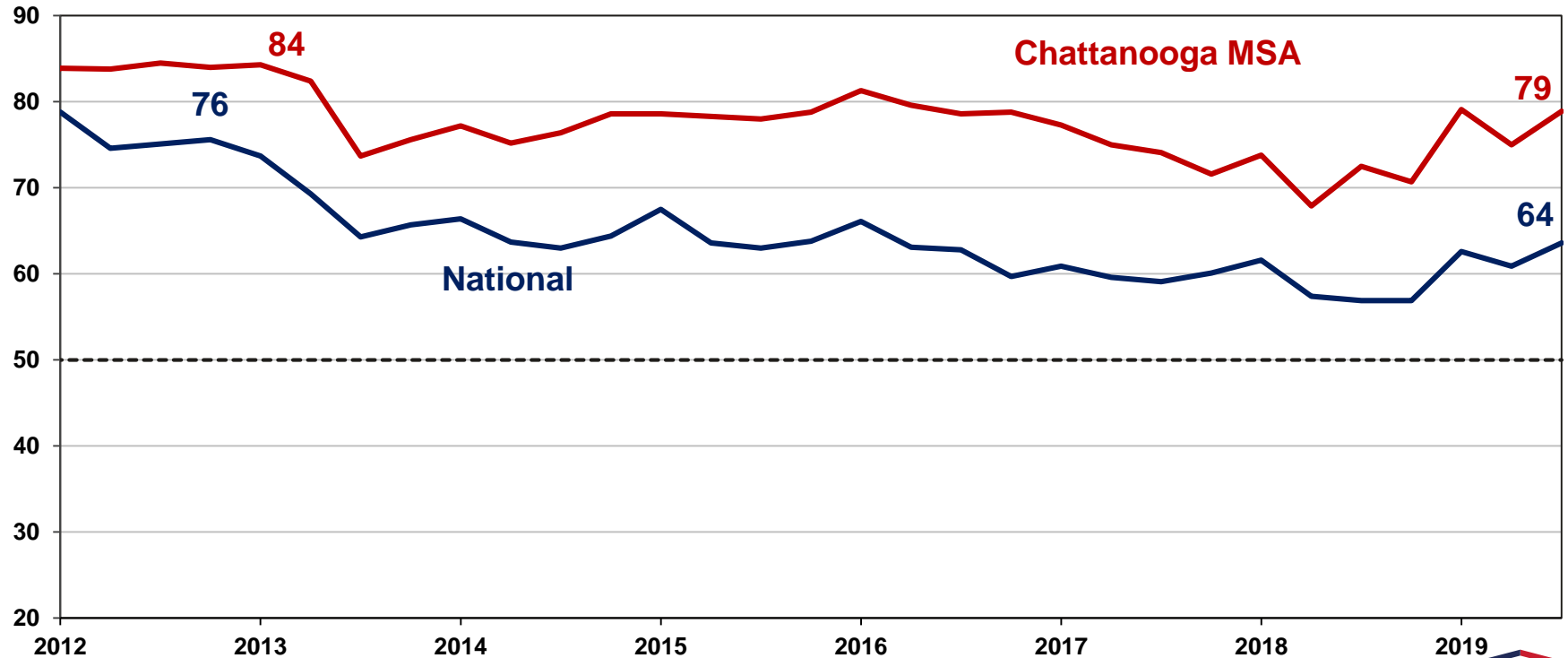
Homeownership Rates in the U.S. by County



Source: 2013-2017 American Community Survey 5-Year Estimates

/ Housing Affordability – NAHB/Wells Fargo HOI

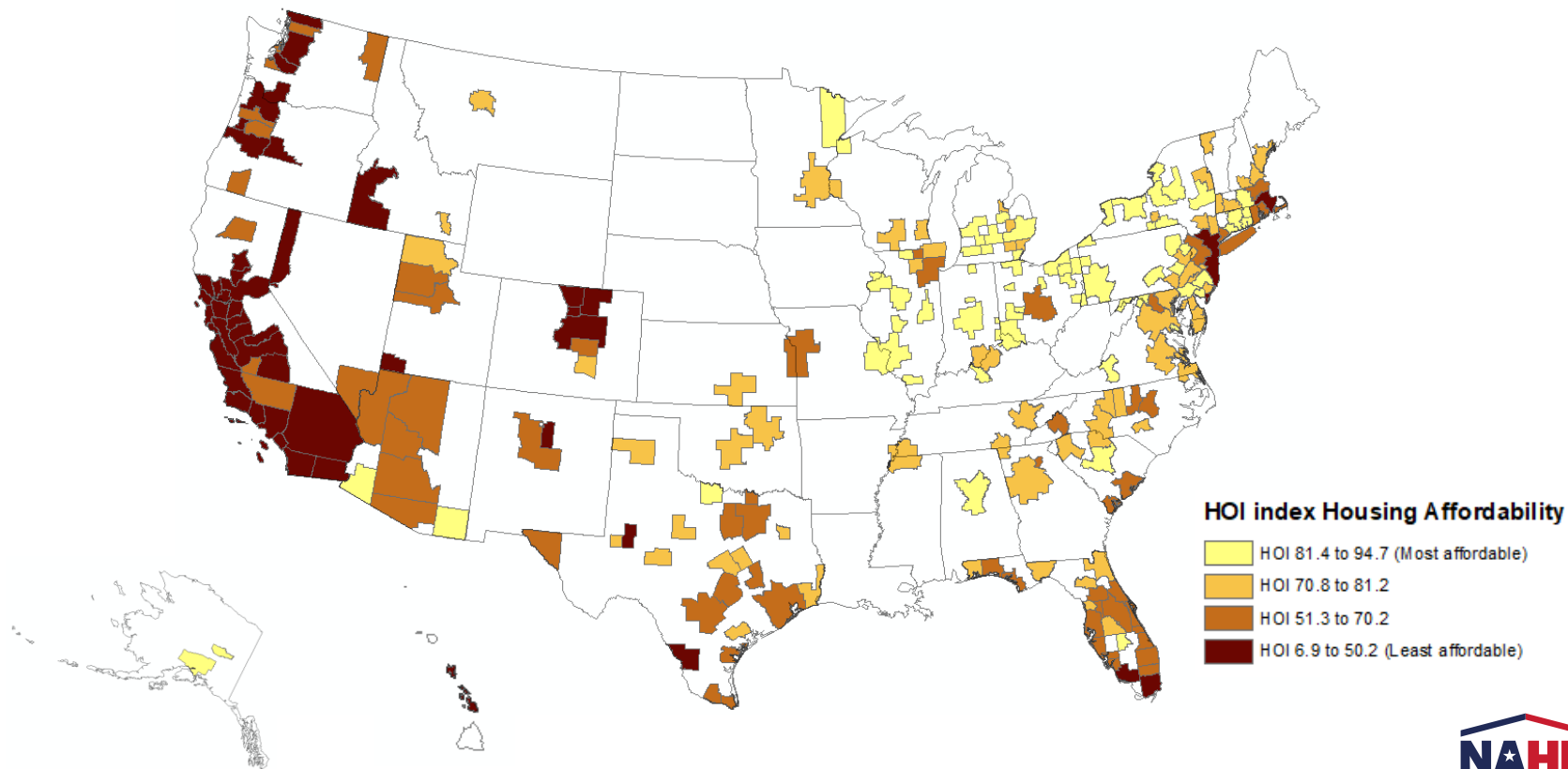
Upward trends



Source: NAHB/Wells Fargo Housing Opportunity Index (HOI)

The Geography of Housing Affordability-NAHB/Wells Fargo HOI

Wide variation



Source: NAHB/Wells Fargo Housing Opportunity Index (HOI)

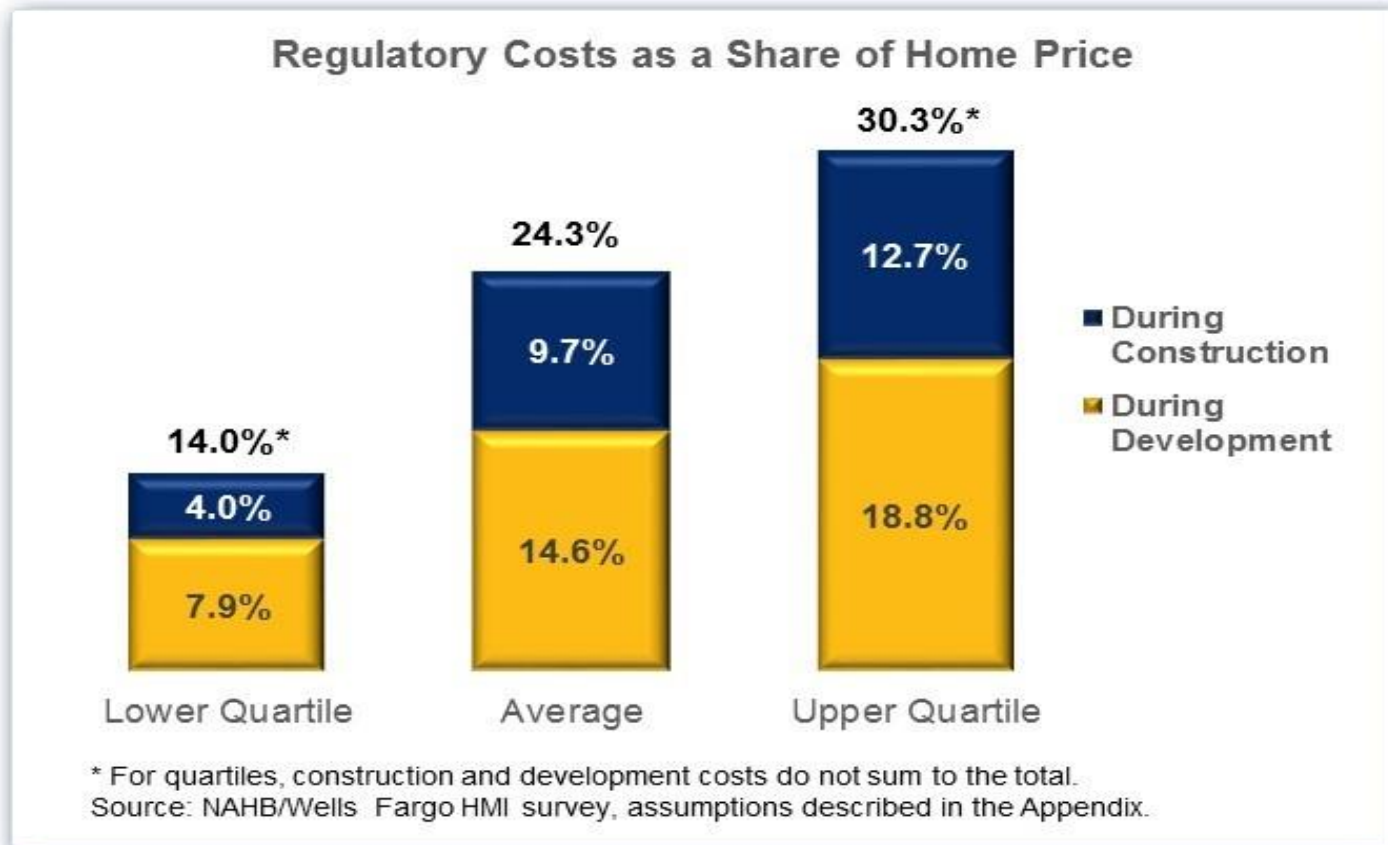


Supply-Side Factors



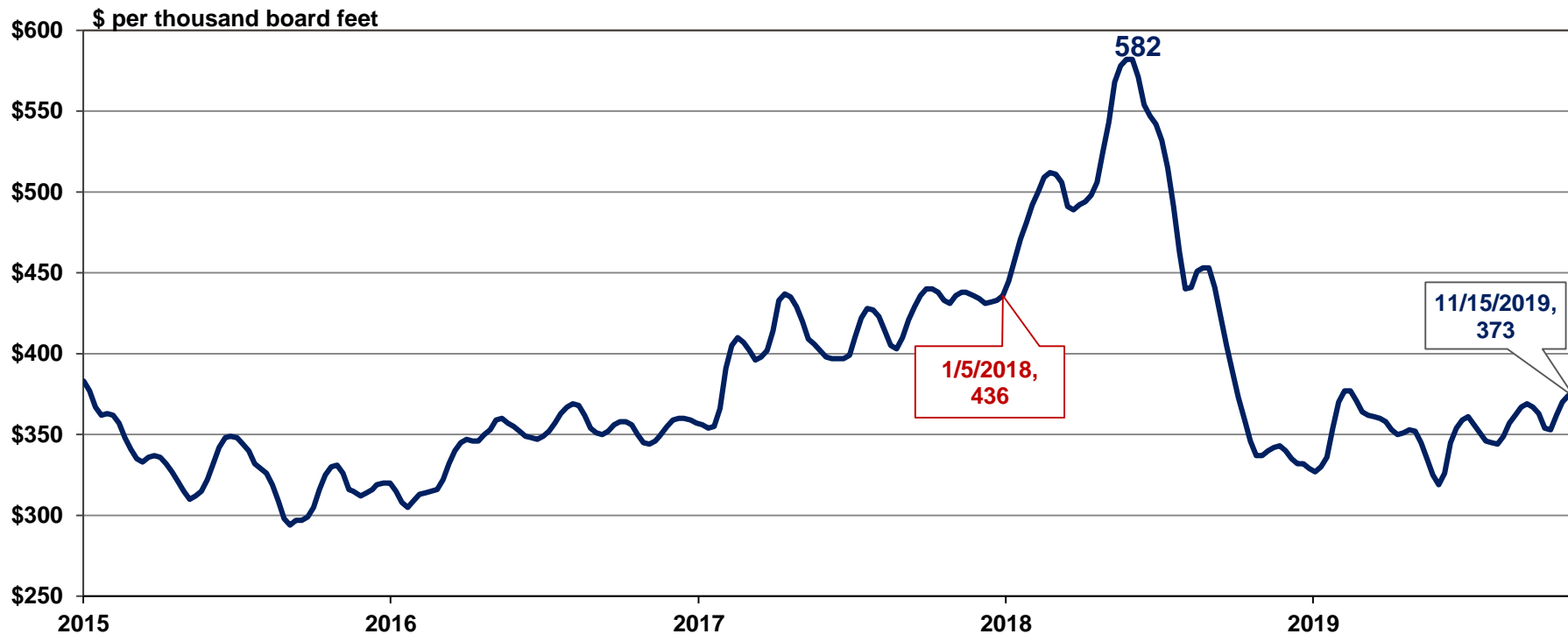
/ Regulatory Costs Rising – Up 29% Over 2011-2016

Total effect of building codes, land use, environmental and other rules



/ Building Materials – Lumber Prices

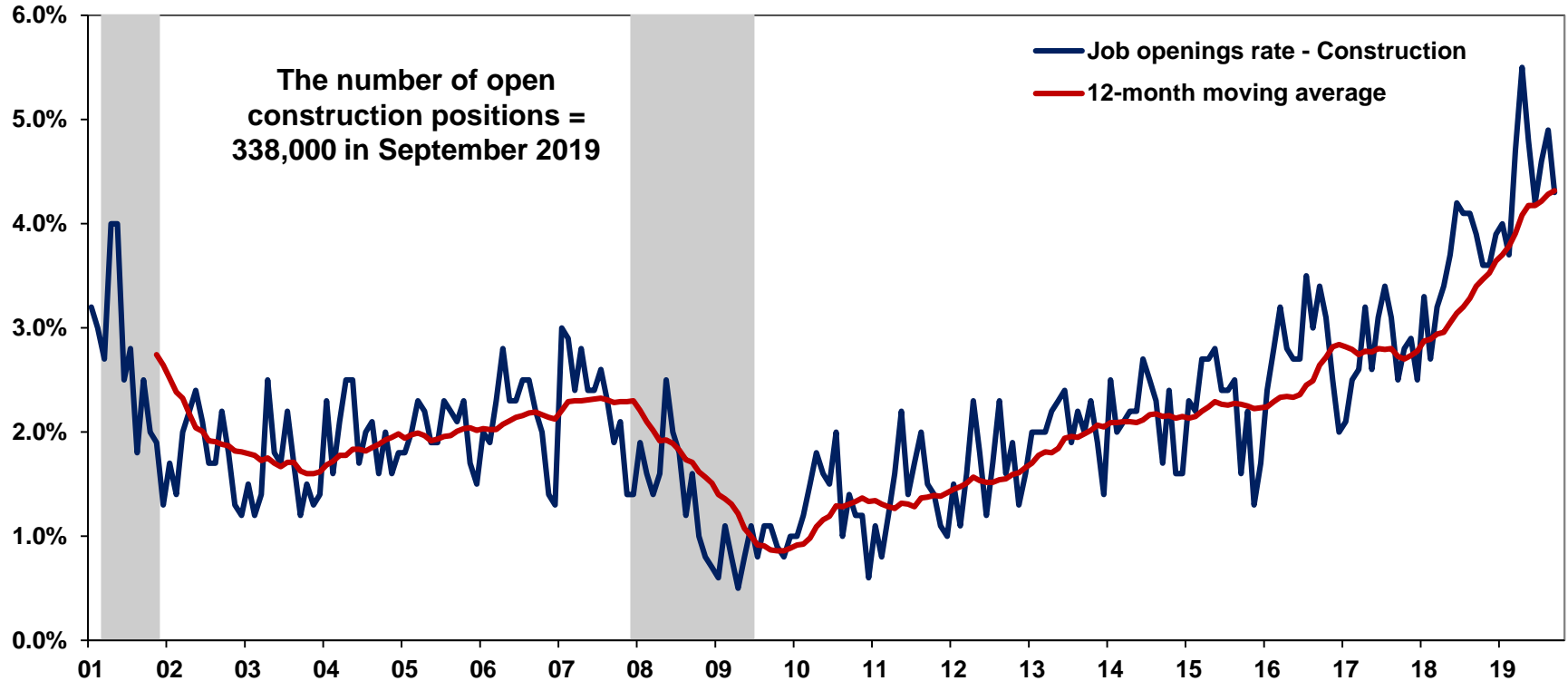
Lumber prices rose 63% to a peak from January 2017; dropped 14% since January 2018



Source: NAHB Analysis; Random Lengths Composite Index

Labor - Construction

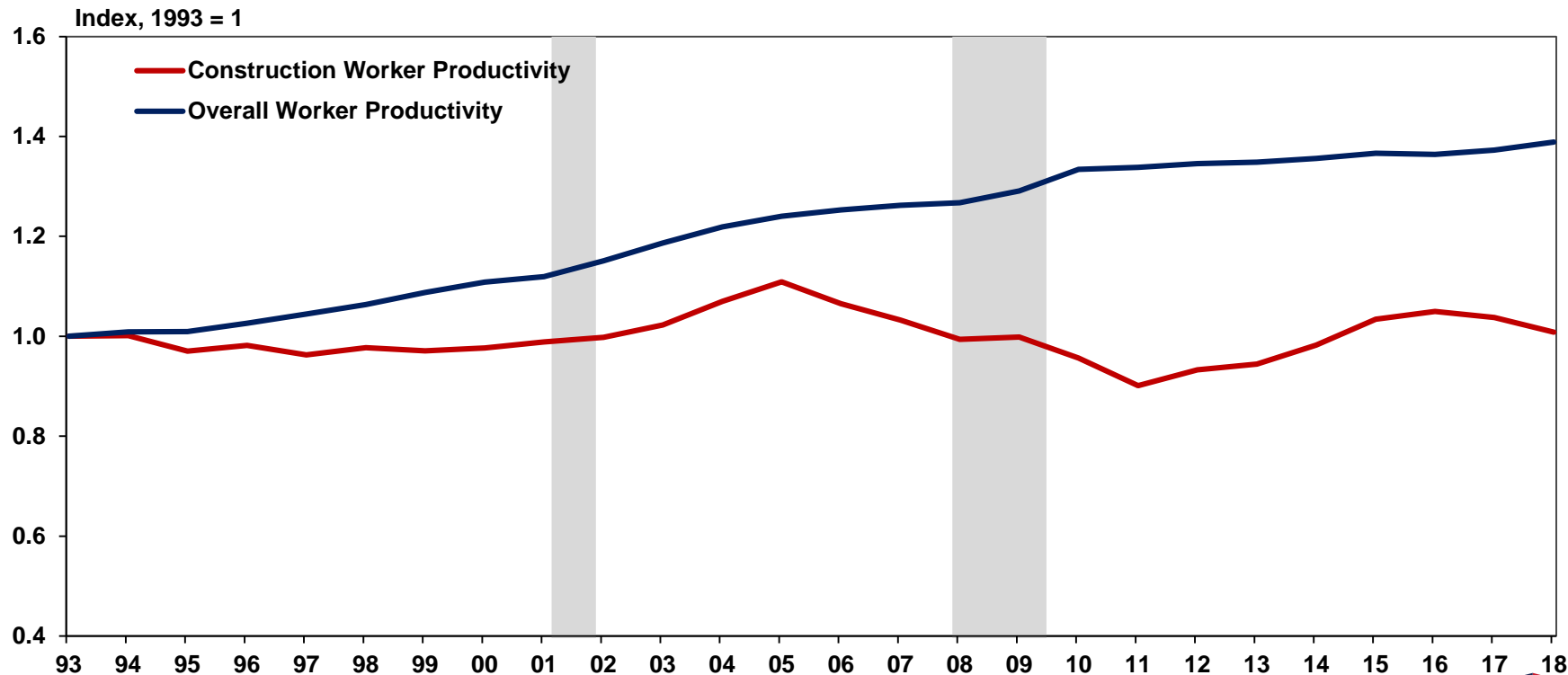
Labor shortage continued through 2018



Source: U.S. Bureau of Labor Statistics (BLS)

Construction Sector Productivity

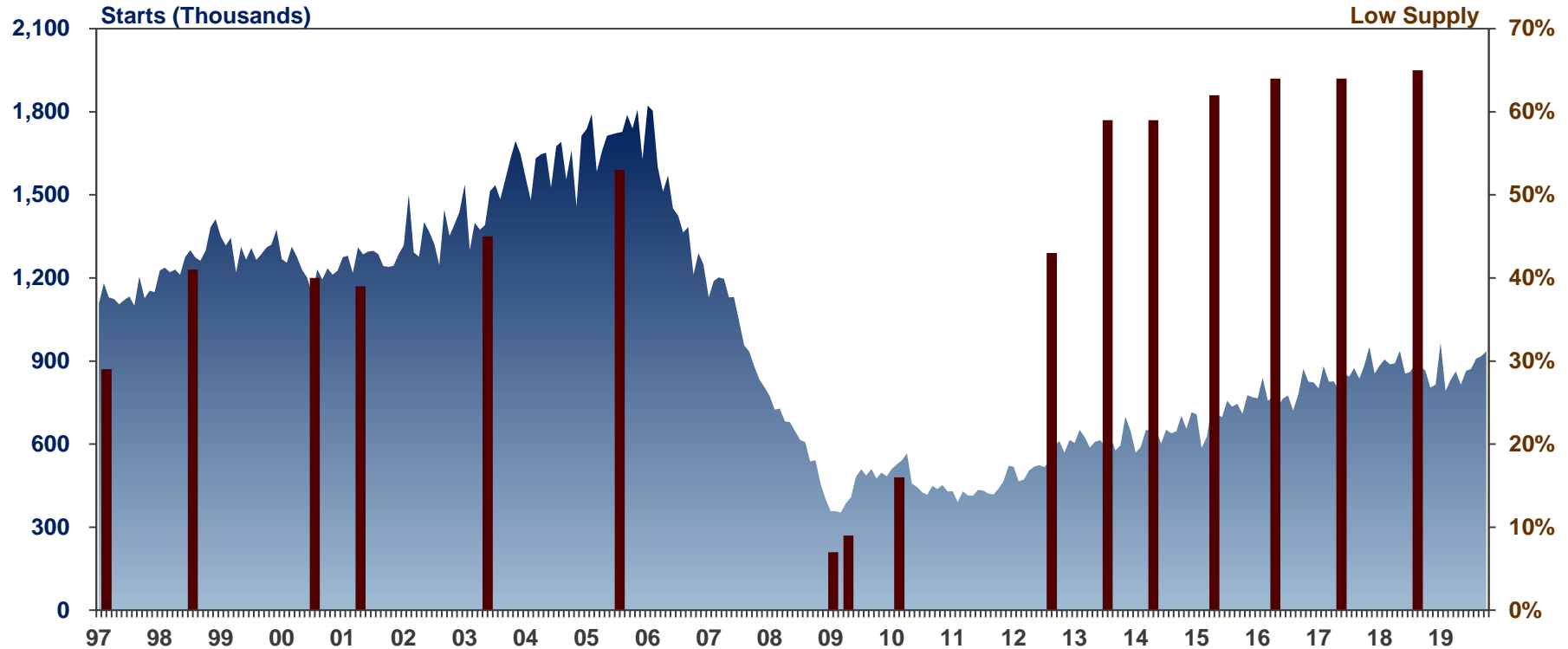
Lagging overall economy



Source: U.S. Bureau of Labor Statistics (BLS)

Lots

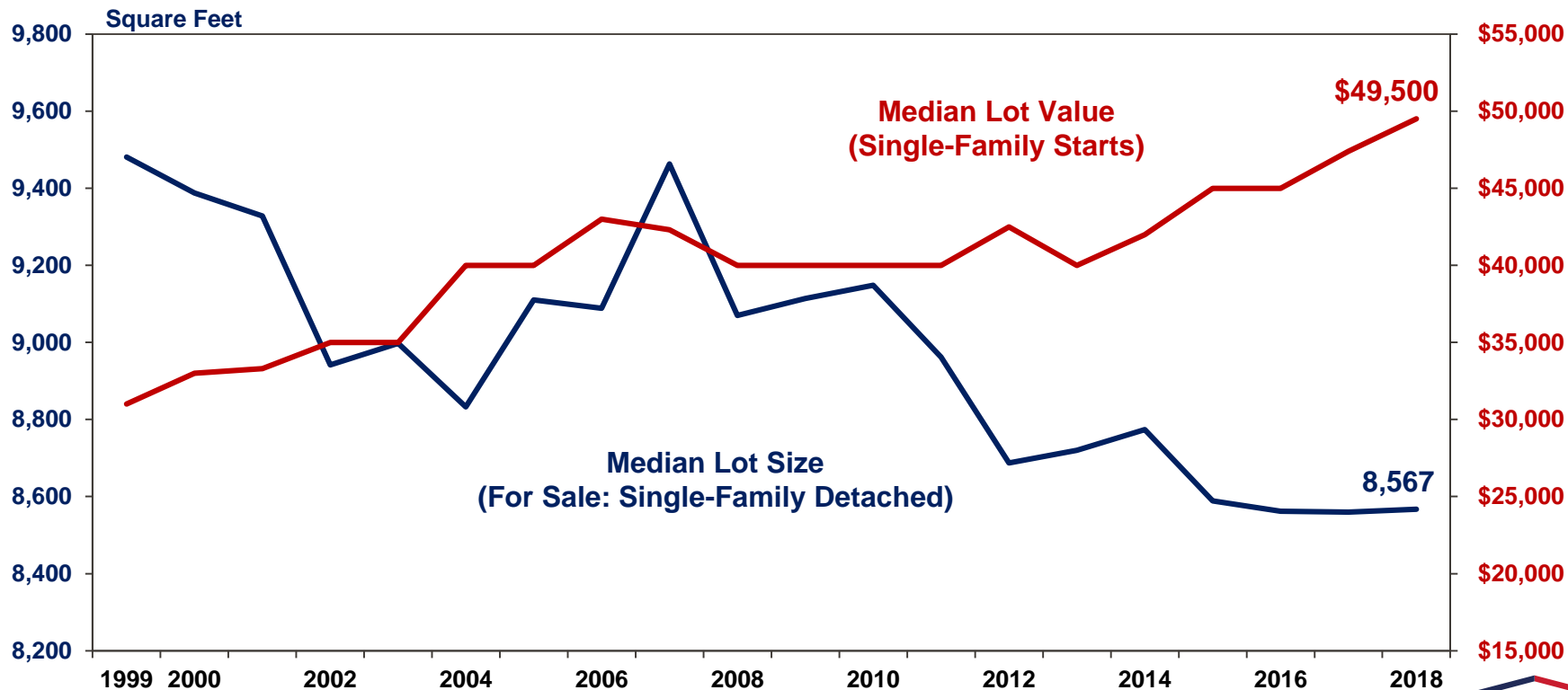
Housing Starts (Area) and Low/Very Low Lot Supply (bars)



Source: Census Bureau and NAHB/Wells Fargo HMI survey

Median Lot Value and Size

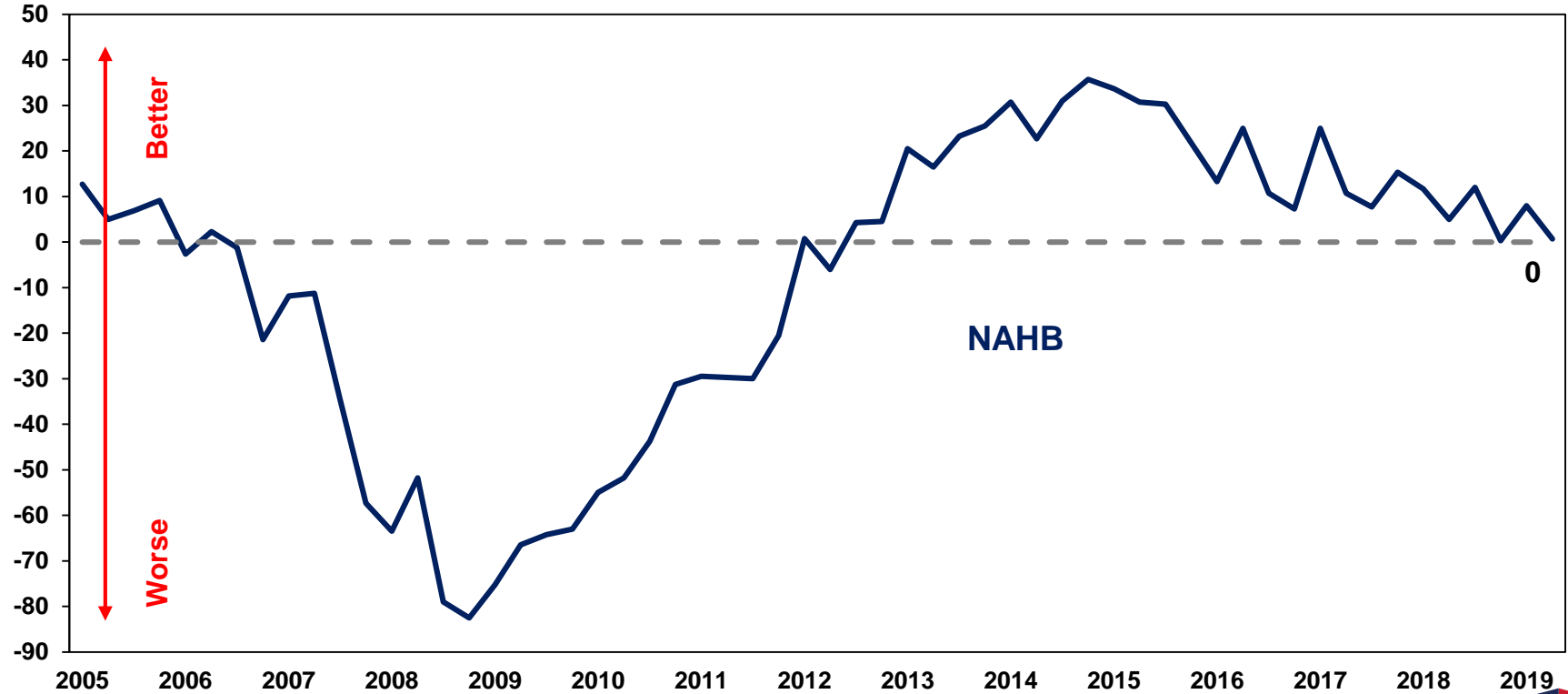
Lot size declining --- lot value increasing



Source: 2017 Survey of Construction (SOC) and NAHB Economics Estimates

/ AD&C Lending Conditions Have Moved to Neutral

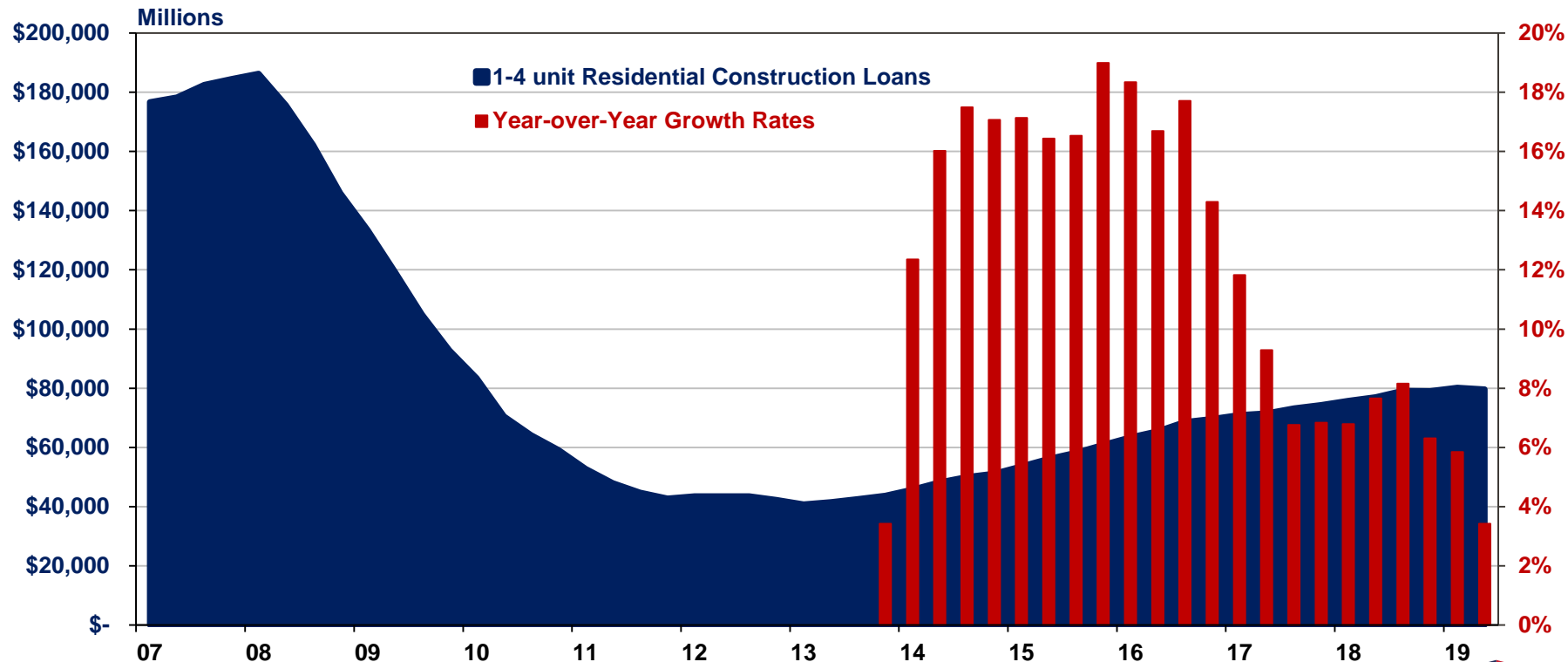
Ends long period of easing



Source: NAHB quarterly survey

/ Lending – AD&C Loan Conditions Tightening

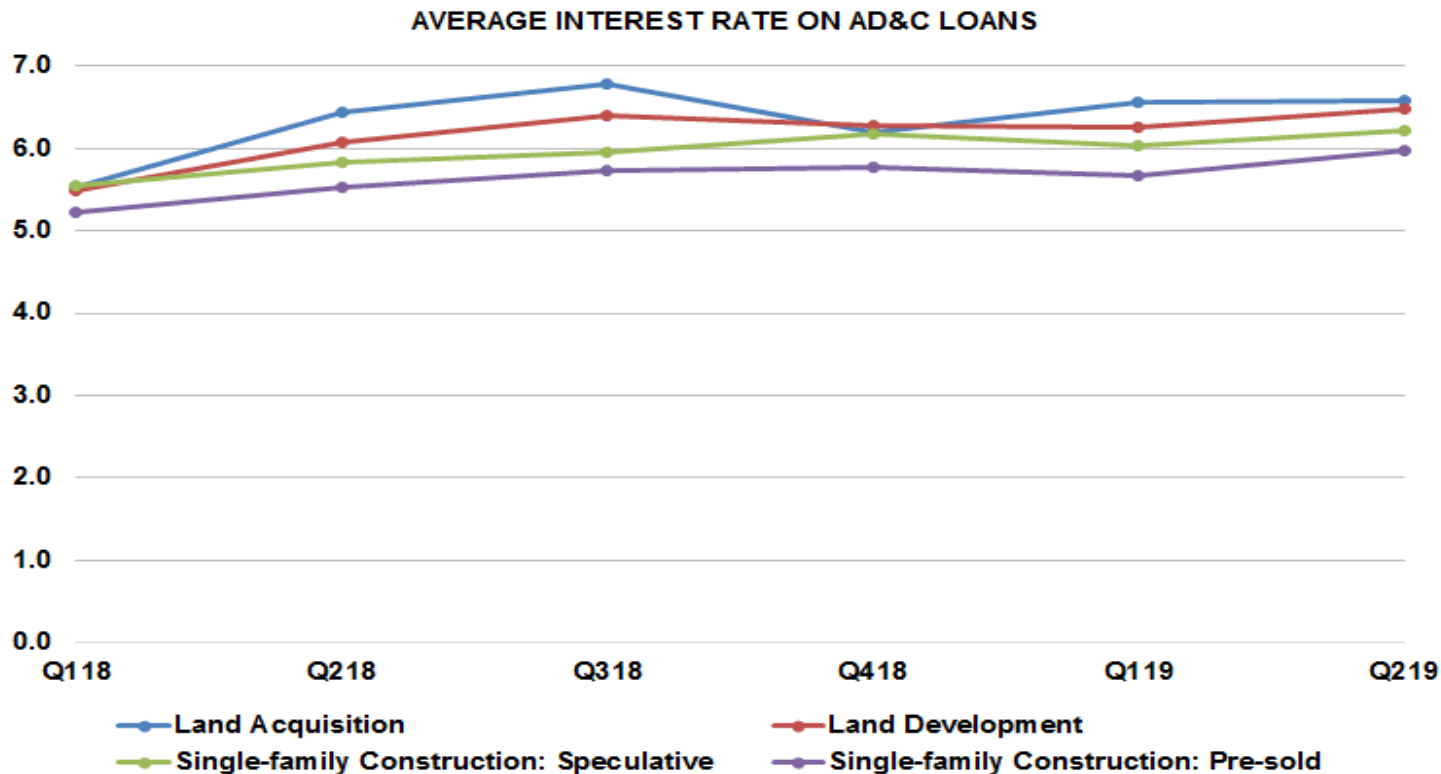
Decline in lending stock for 4Q18 and 2Q19



Source: Federal Deposit Insurance Corporation (FDIC).

AD&C Interest Rates Remain Elevated

Does not match recent rate history for mortgages



Source: NAHB quarterly survey.



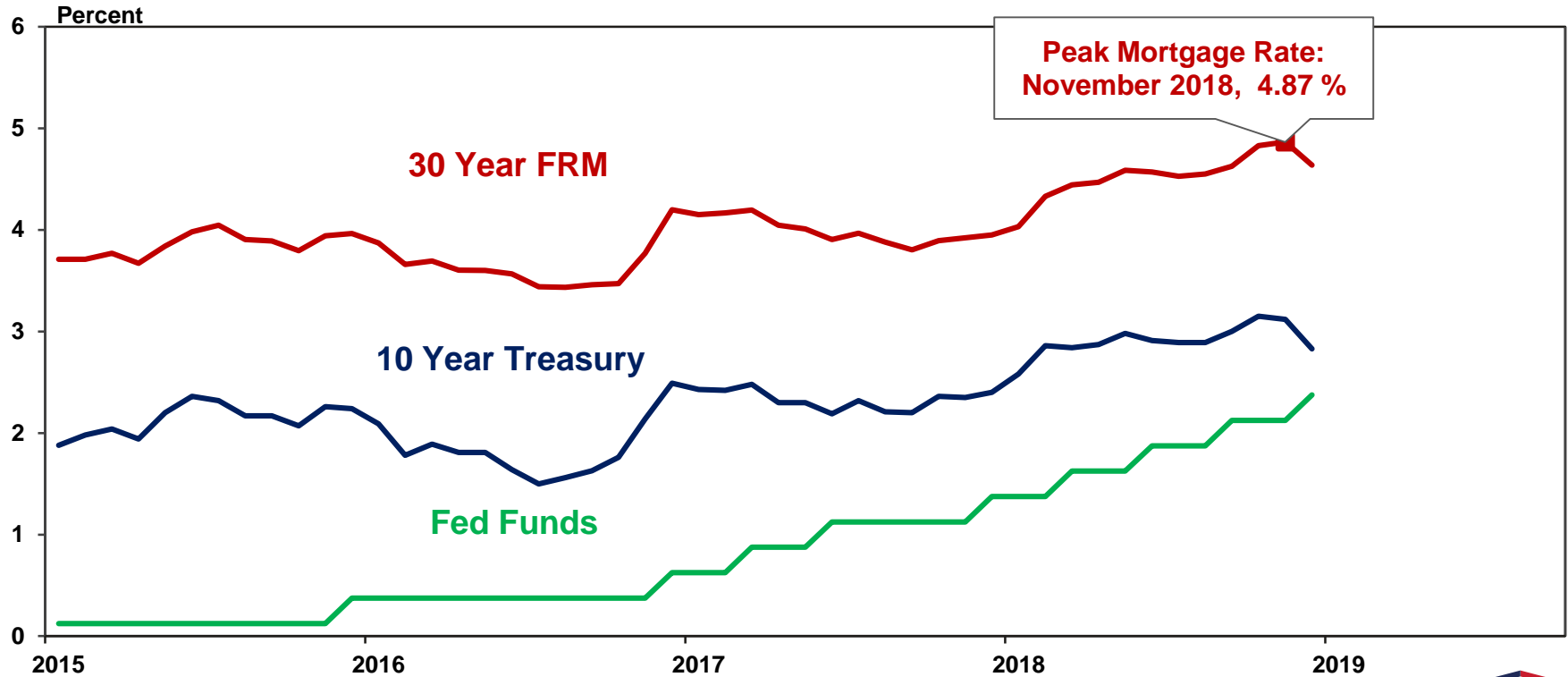
Construction Outlook

*2019 Rebound
and Forecasts*



Interest Rates

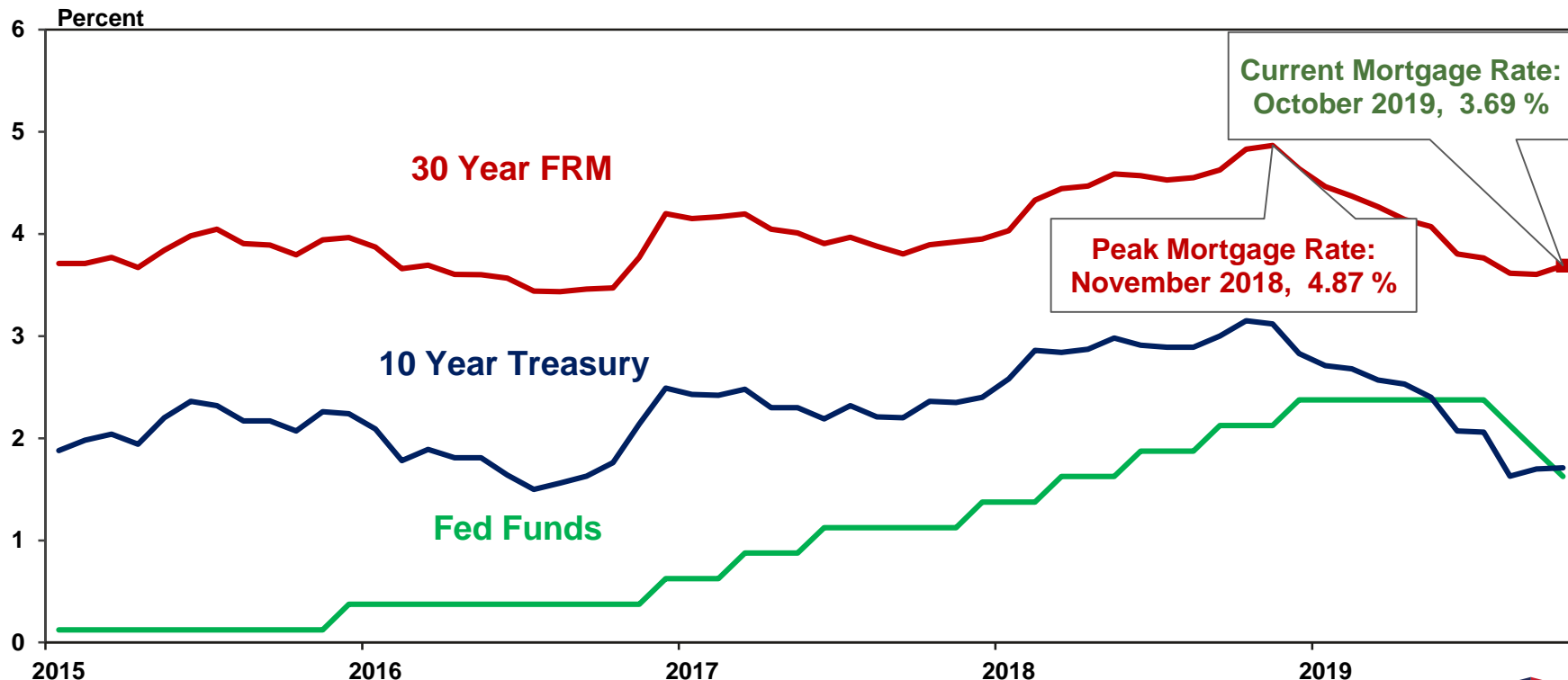
Mortgage rates increased during 2018 due to hawkish Fed



Source: Federal Reserve and Freddie Mac data

Interest Rates

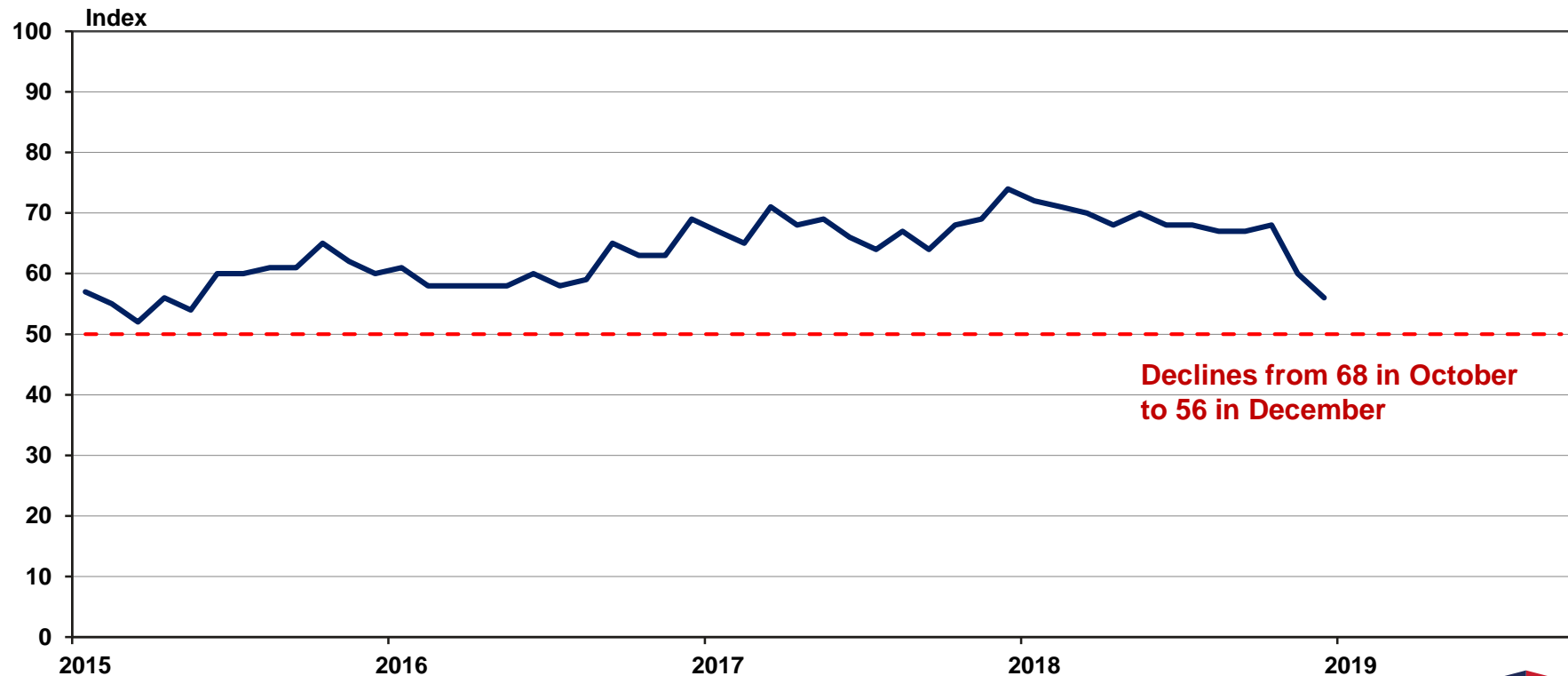
Rates have declined, led by 50 basis point cut by the Fed and slower growth expectations



Source: Federal Reserve and Freddie Mac data

NAHB/Wells Fargo Housing Market Index (HMI)

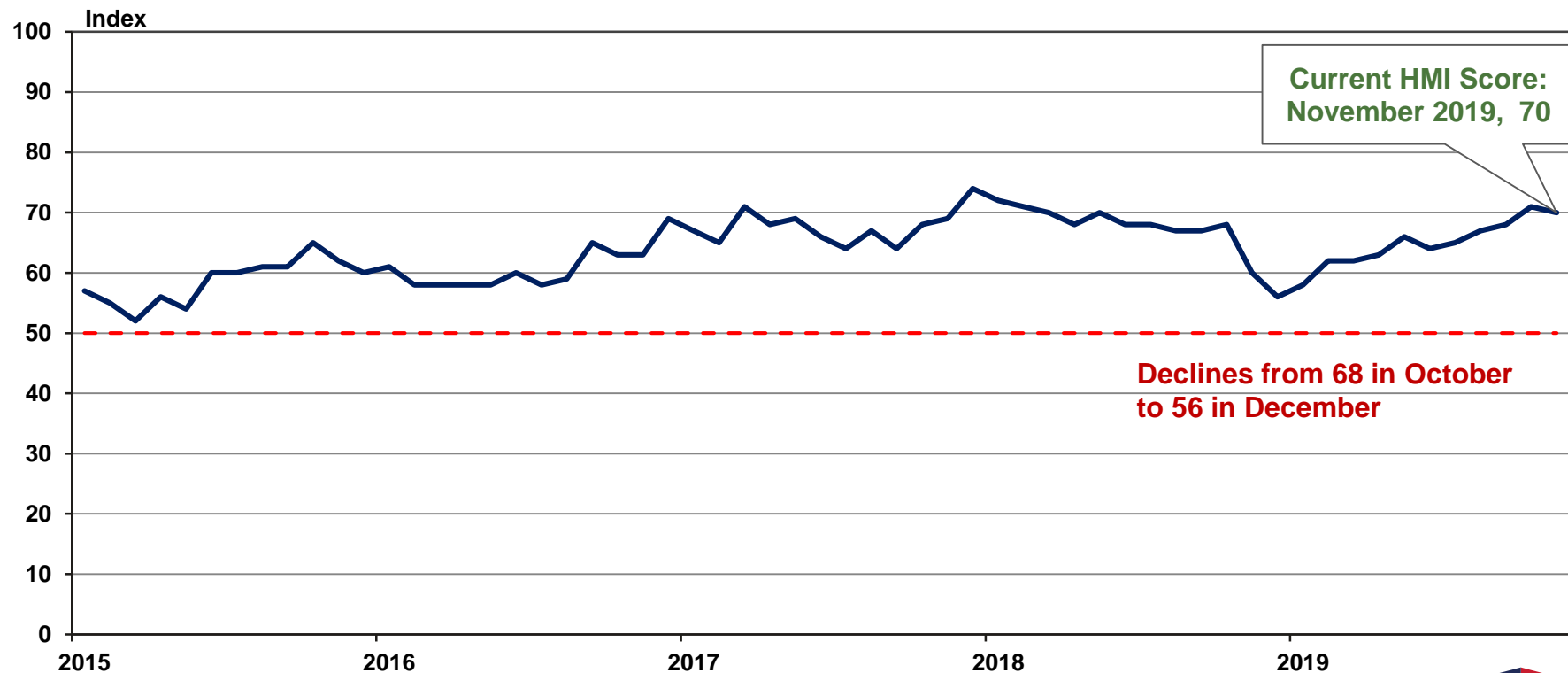
The HMI was the leading indicator of the late 2018 slowdown



Source: NAHB/Wells Fargo HMI survey

NAHB/Wells Fargo Housing Market Index (HMI)

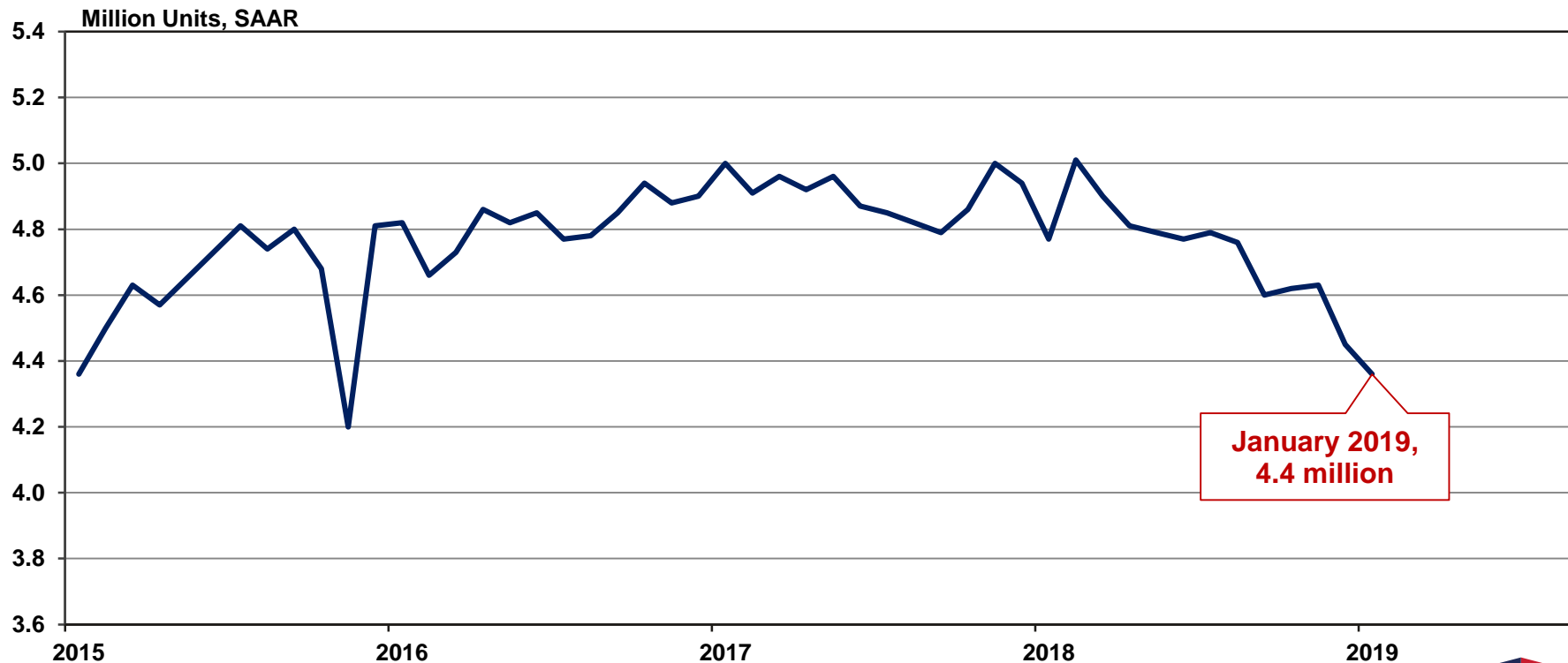
Rebound in the HMI during 2019



Source: NAHB/Wells Fargo HMI survey

Existing Single-Family Home Sales (EHS)

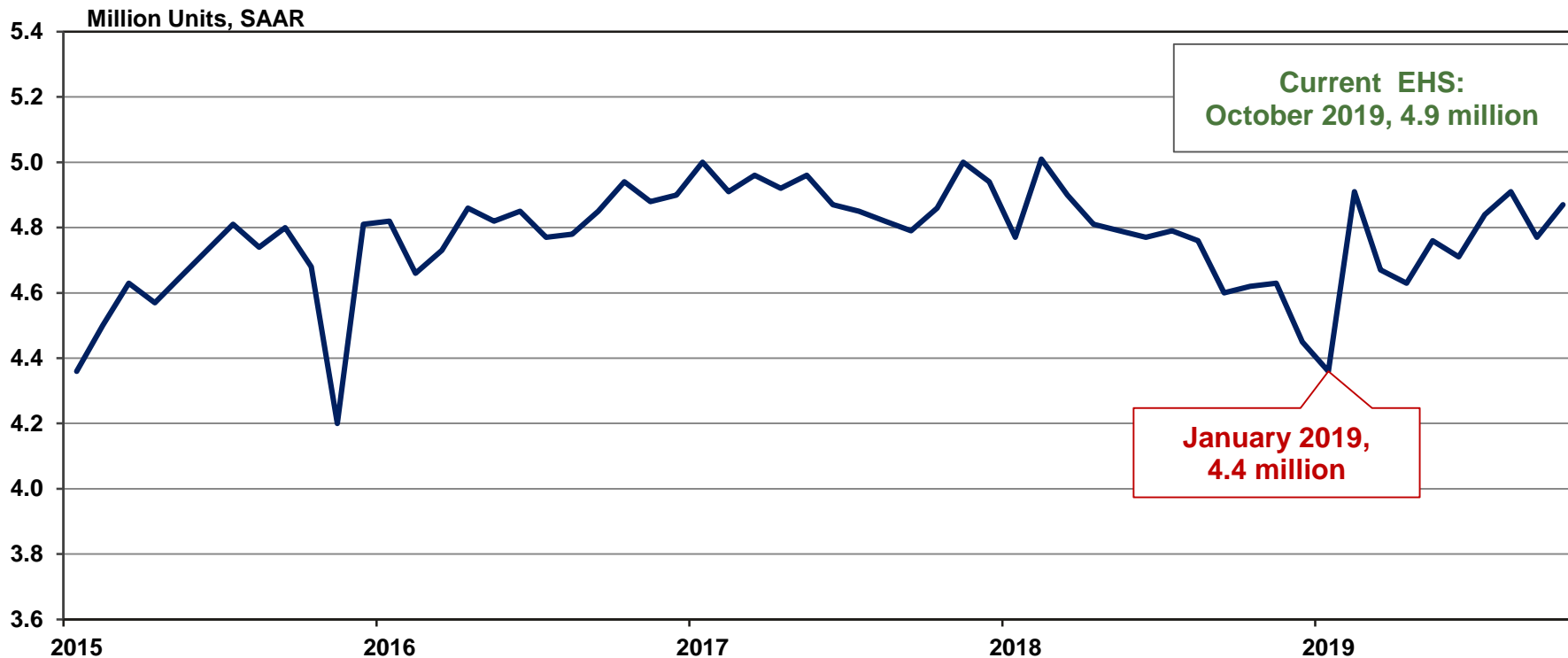
Resales of single-family homes declining since 2018



Source: National Association of Realtors (NAR)

Existing Single-Family Home Sales (EHS)

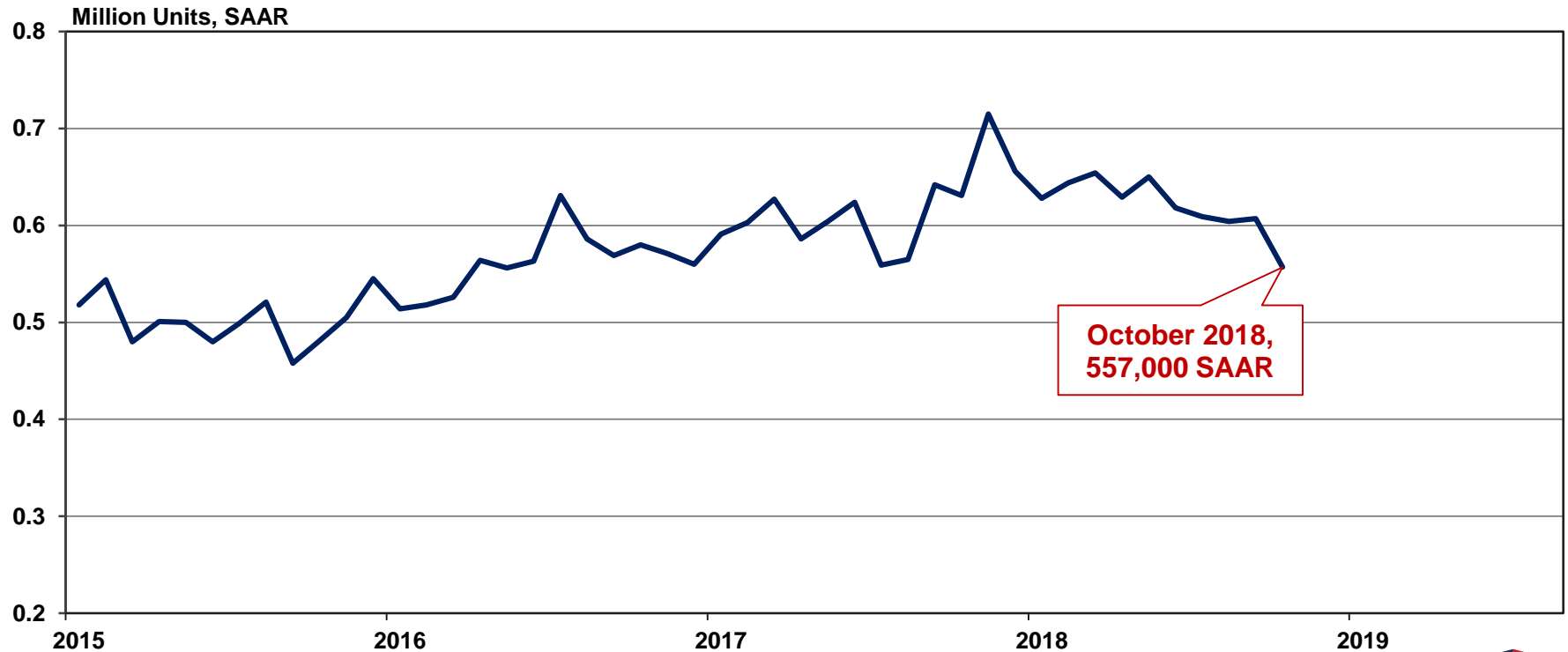
During 2019, the pace of existing sales has rebounded



Source: National Association of Realtors (NAR)

New Single-Family Home Sales

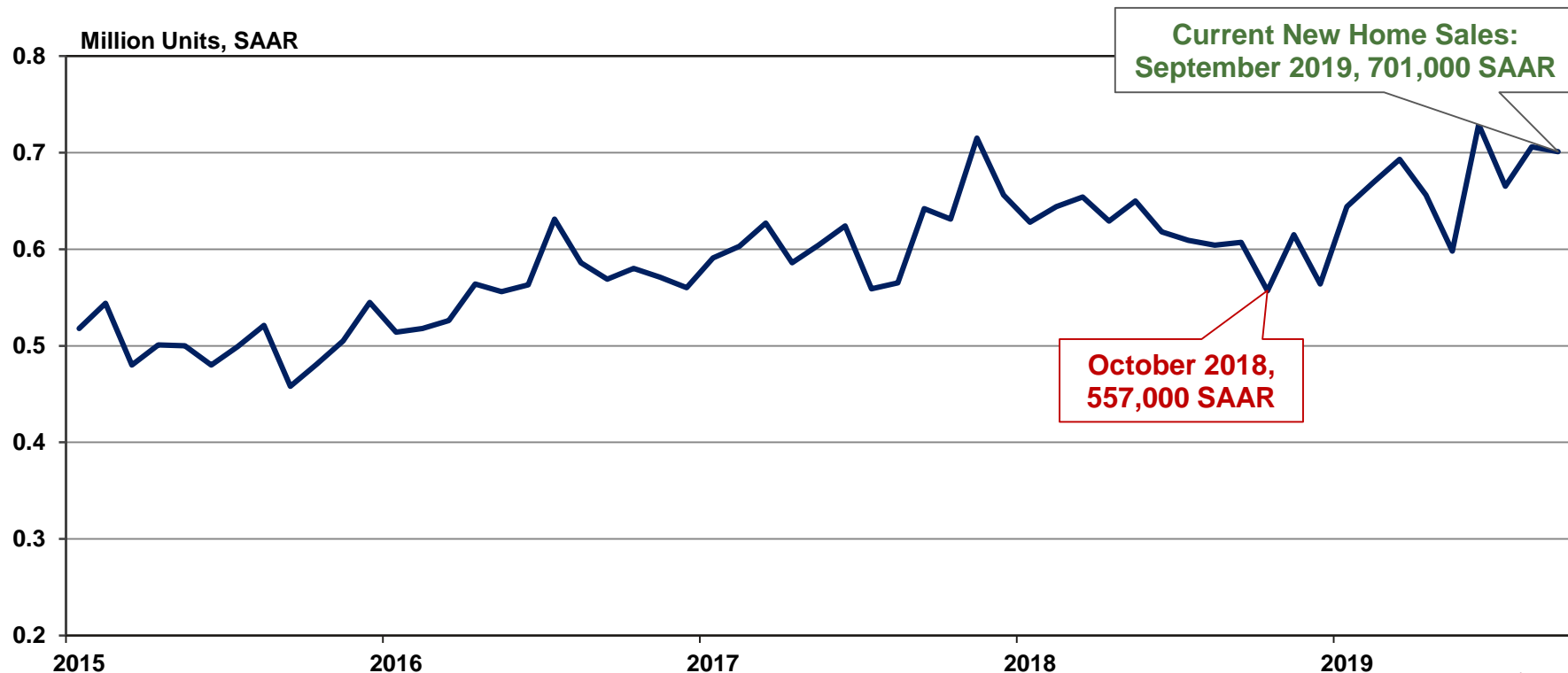
Pace of new home sales declined during 2018



Source: U.S. Census Bureau (BOC)

New Single-Family Home Sales

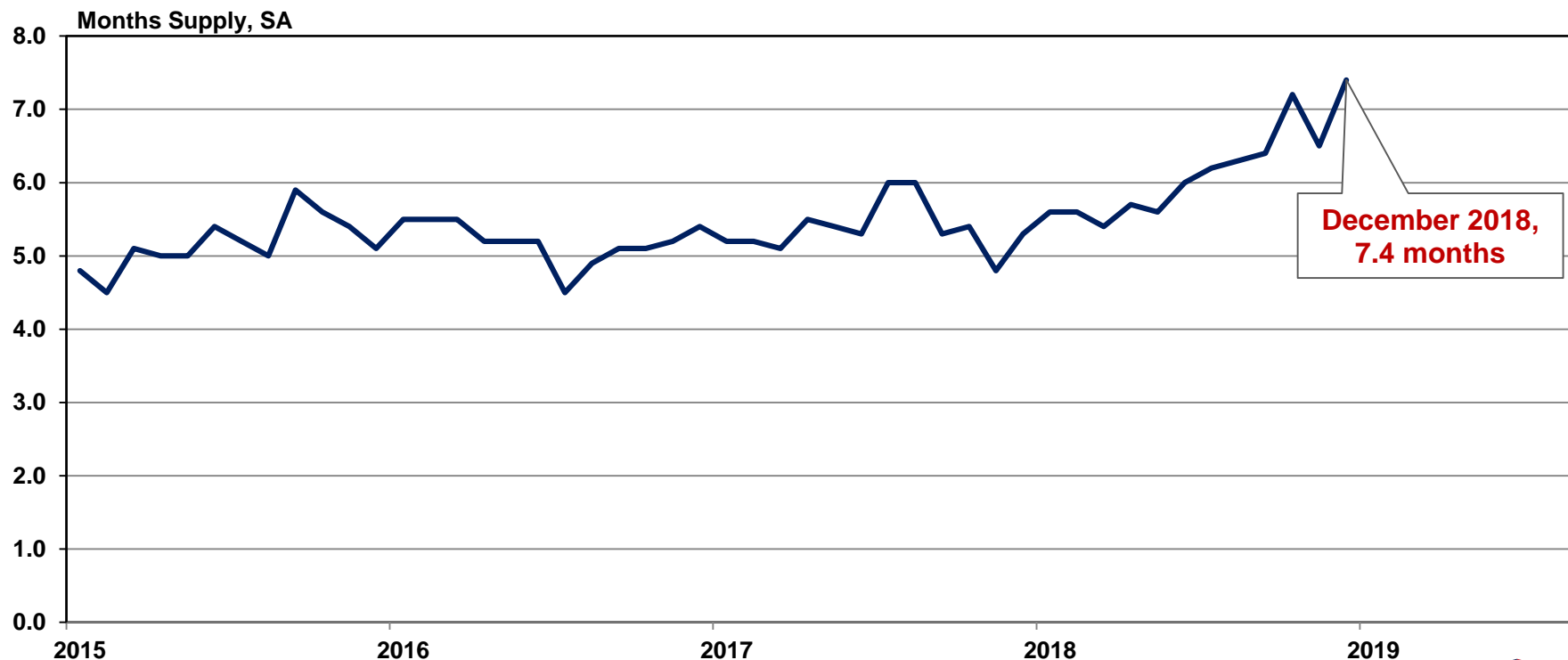
Significant rebound in 2019, sales 7.2% higher YTD 2019



Source: U.S. Census Bureau (BOC)

New Home Inventory

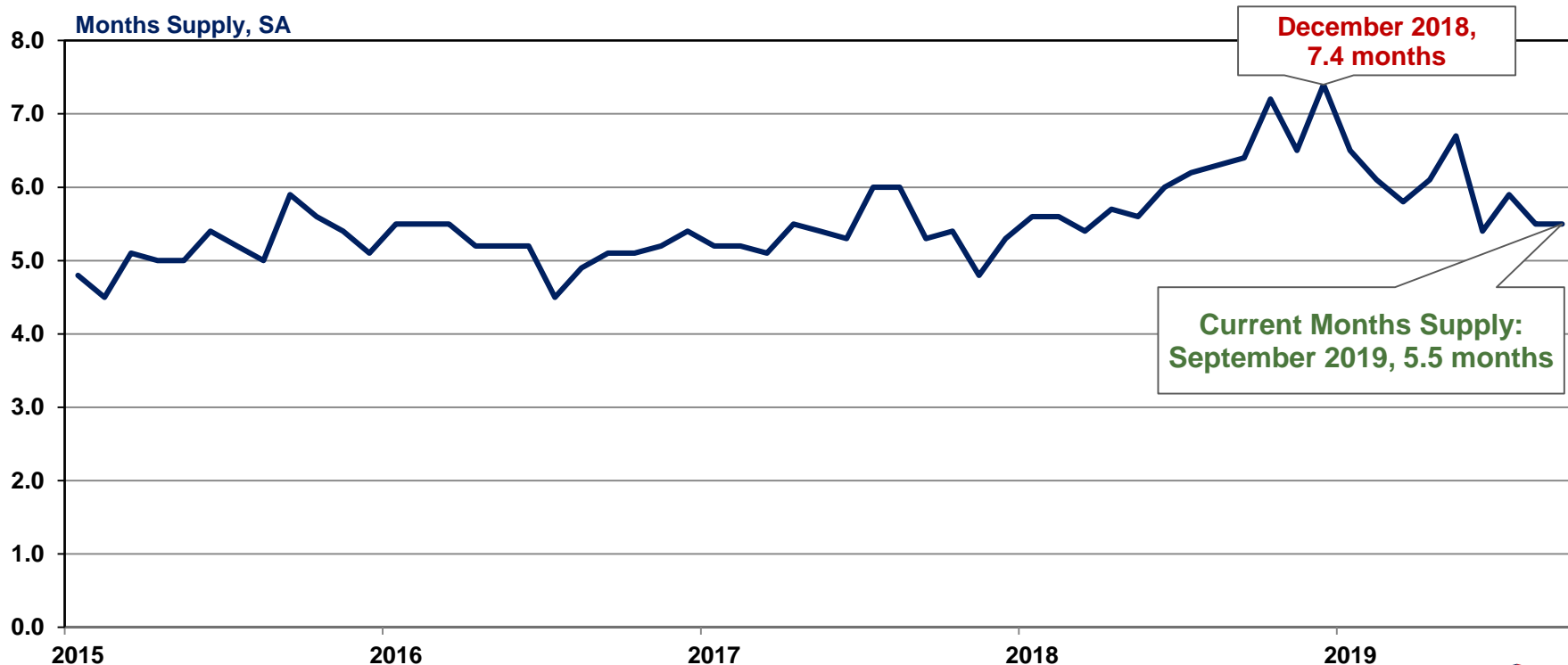
Slowdown in sales, raised inventory above benchmark 6 months' supply level



Source: U.S. Census Bureau (BOC)

New Home Inventory

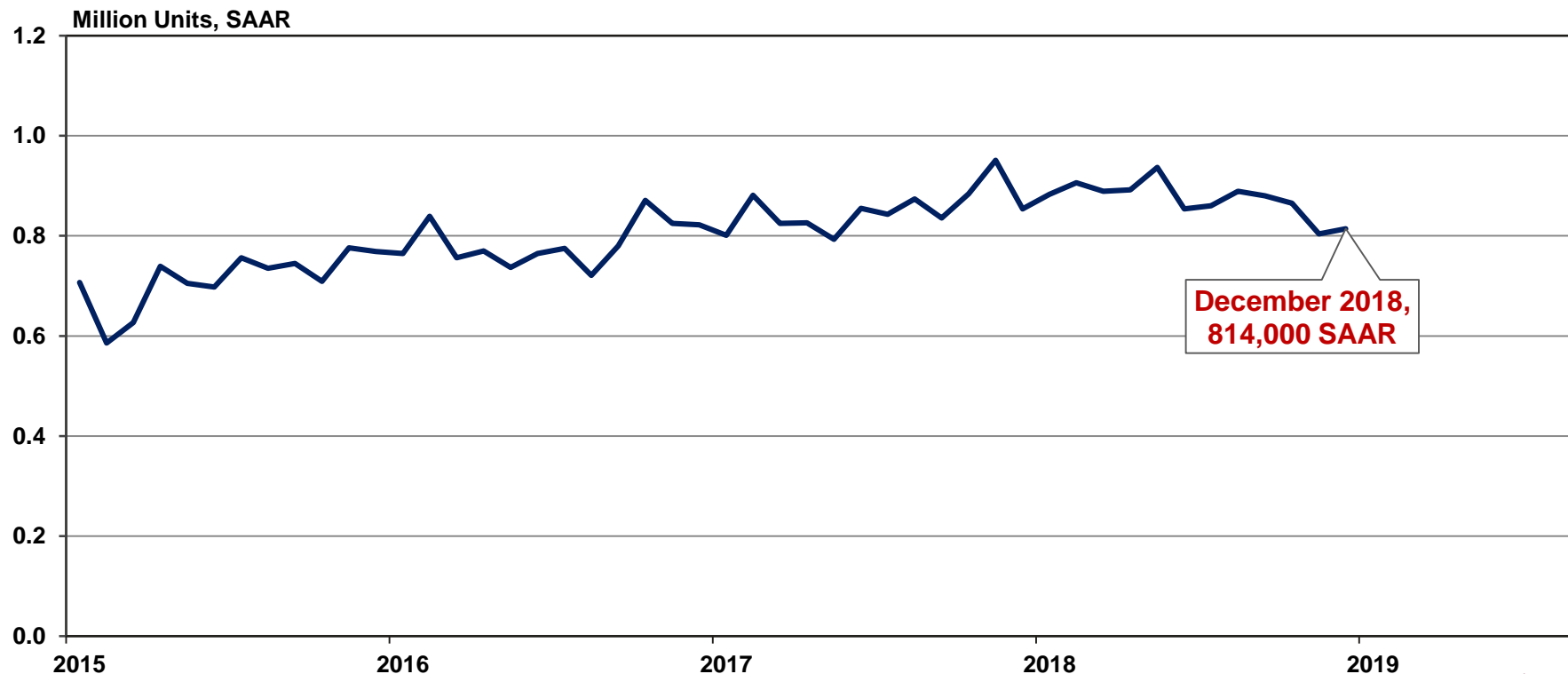
Increase in sales rate has lowered sales-adjusted inventory levels



Source: U.S. Census Bureau (BOC)

/ Single-Family Housing Starts

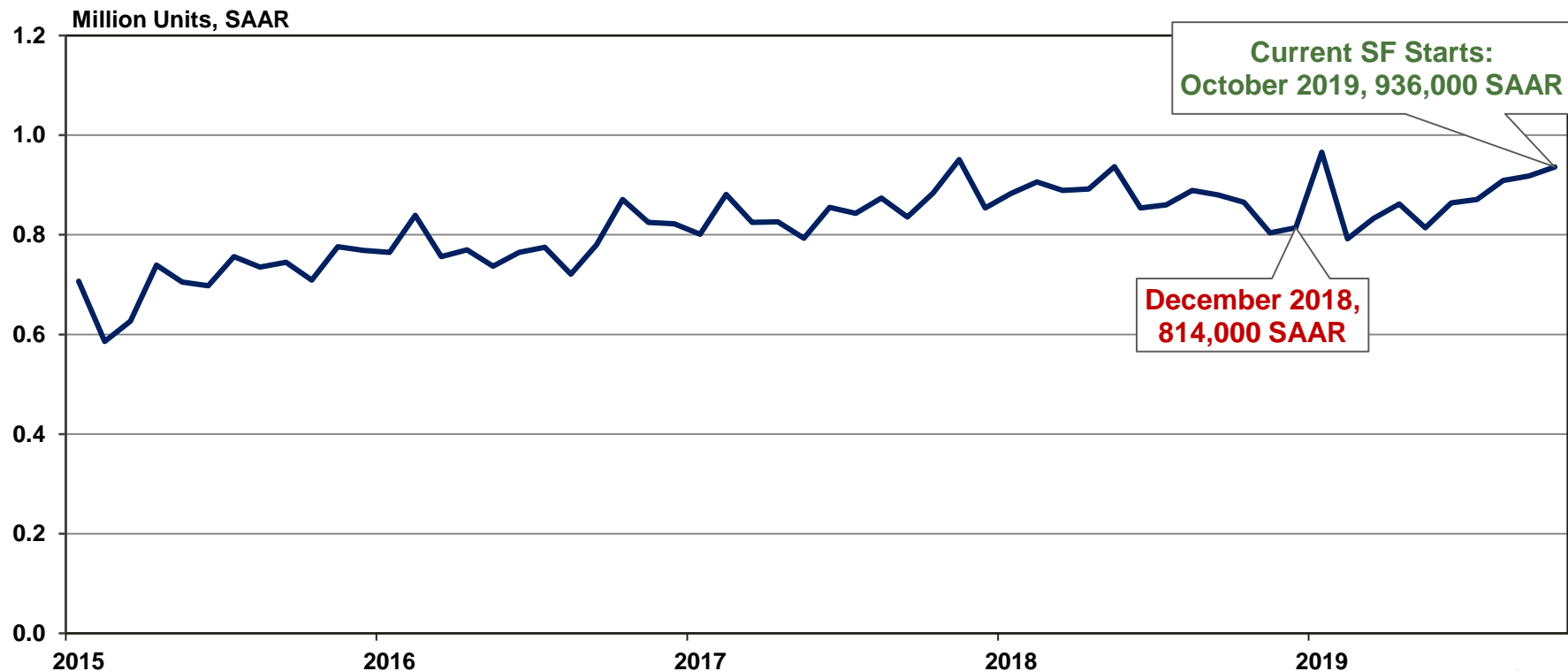
As inventory levels increased, permits and starts declined



Source: U.S. Census Bureau (BOC)

Single-Family Housing Starts

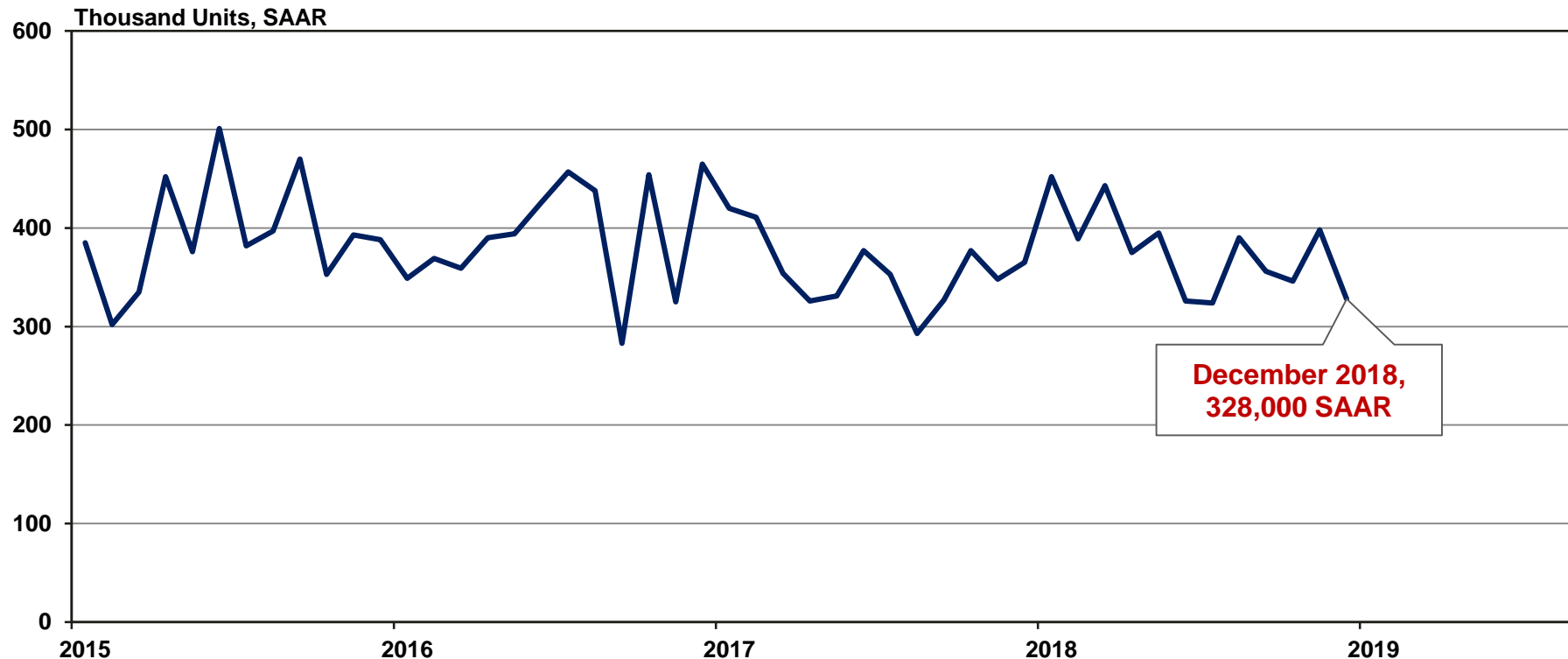
Step-up in sales has modestly pace of permits and starts



Source: U.S. Census Bureau (BOC)

/ Multifamily Housing Starts

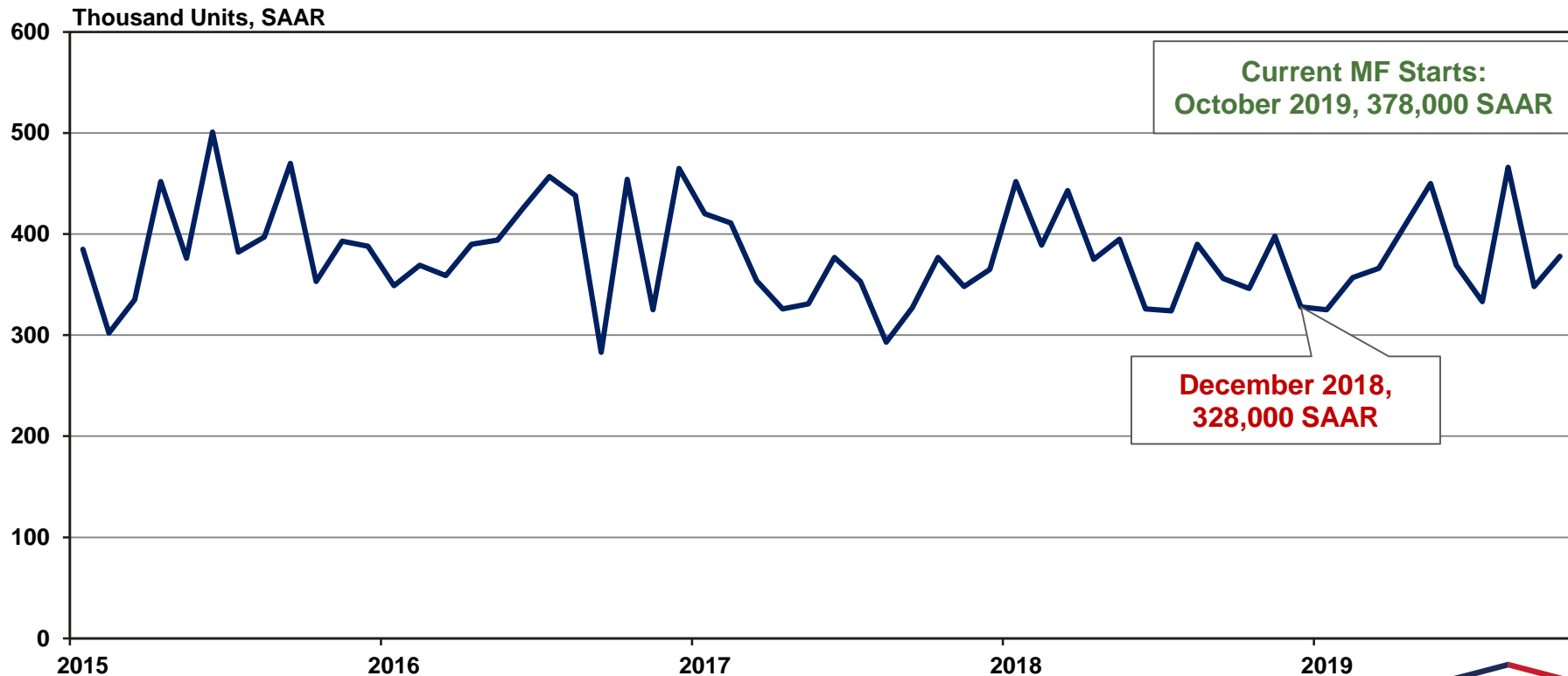
Apartment construction has leveled off since 2015



Source: U.S. Census Bureau (BOC)

/ Multifamily Housing Starts

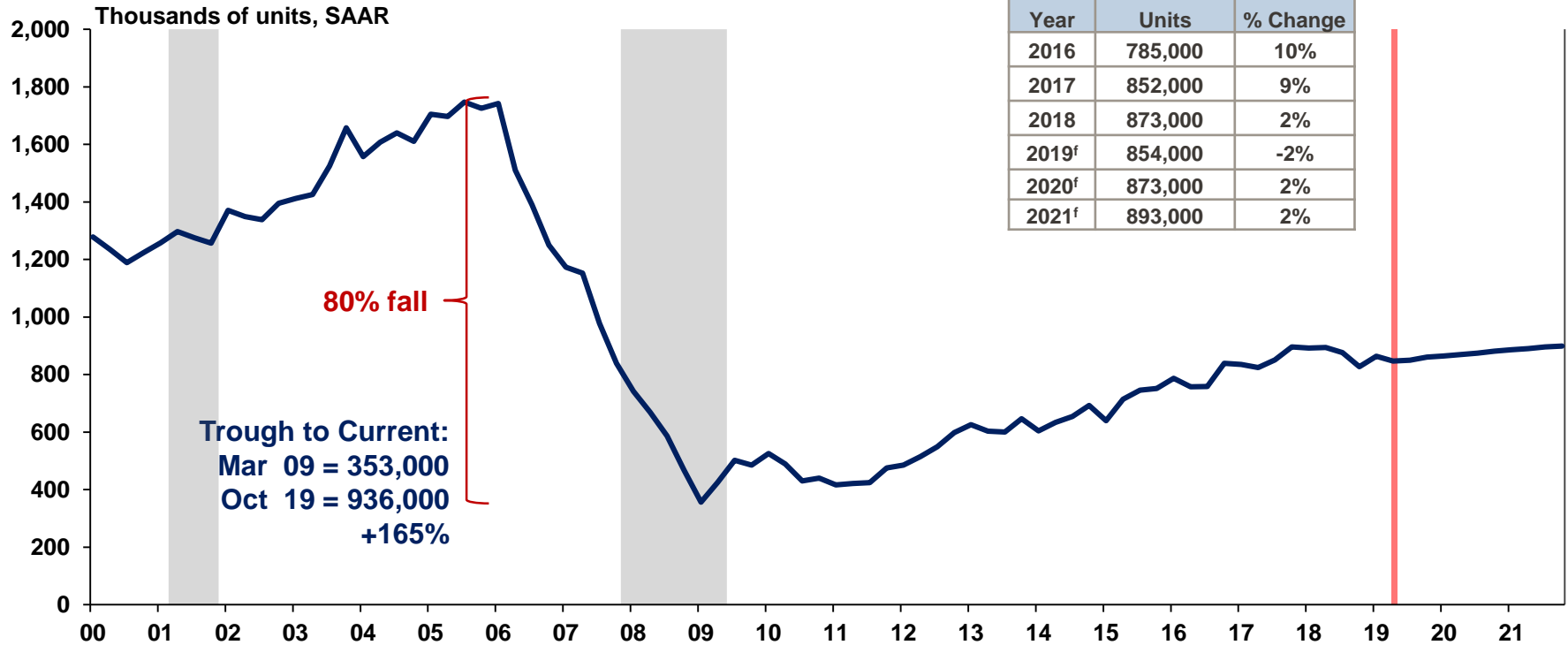
Apartment construction increased slightly due to single-family slowdown



Source: U.S. Census Bureau (BOC)

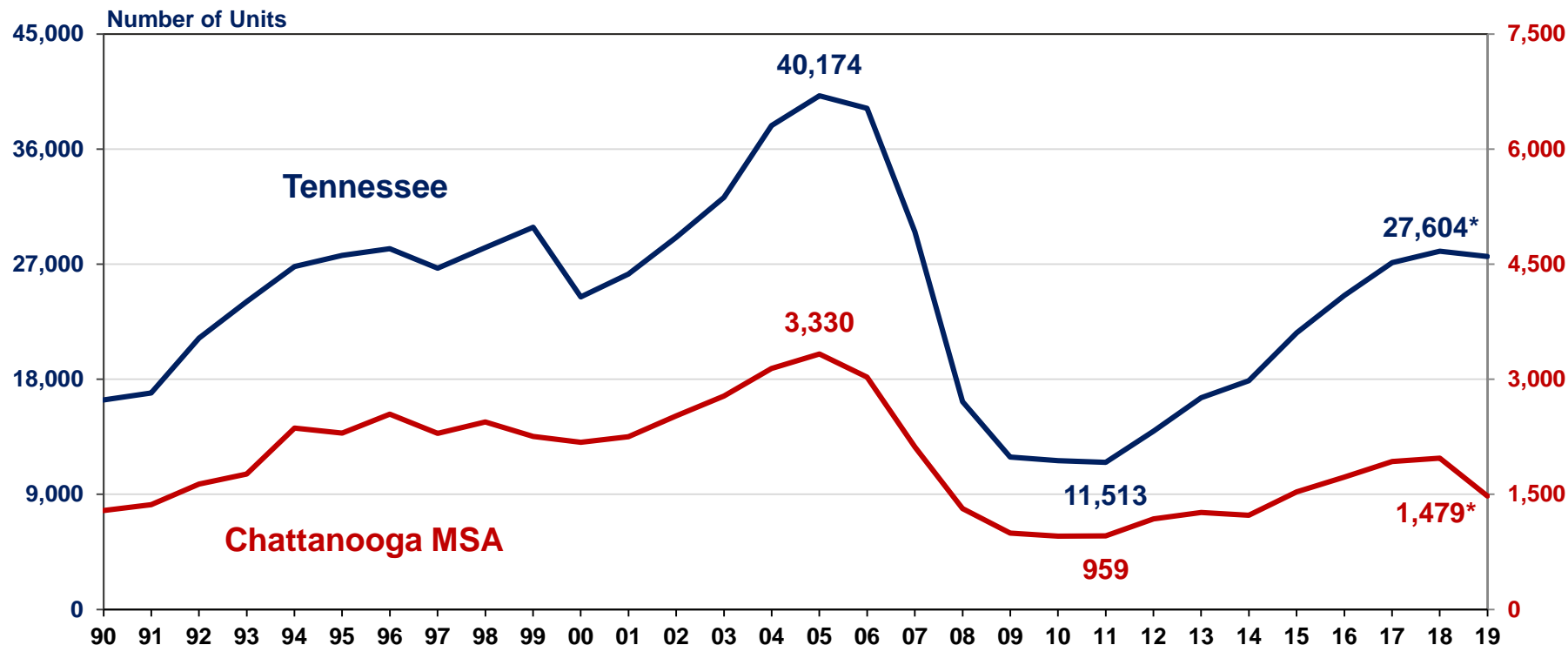
Single-Family Starts

Limited growth as economy slows



Source: U.S. Census Bureau (BOC) and NAHB forecast

Single-Family Building Permits – TN and Chattanooga MSA

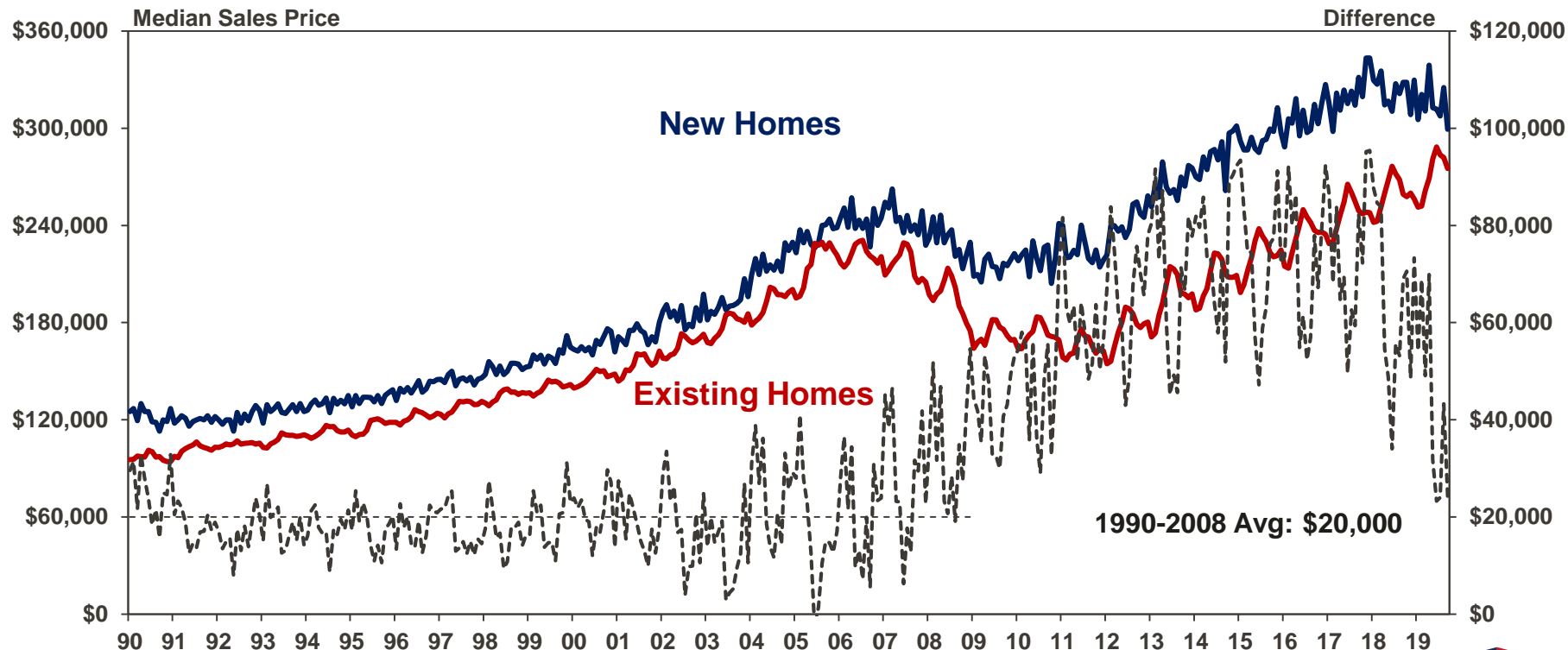


Source: U.S. Census Bureau (BOC)

Note: * 2019 permits are projected based on YTD data.

Home Prices of New and Existing Homes

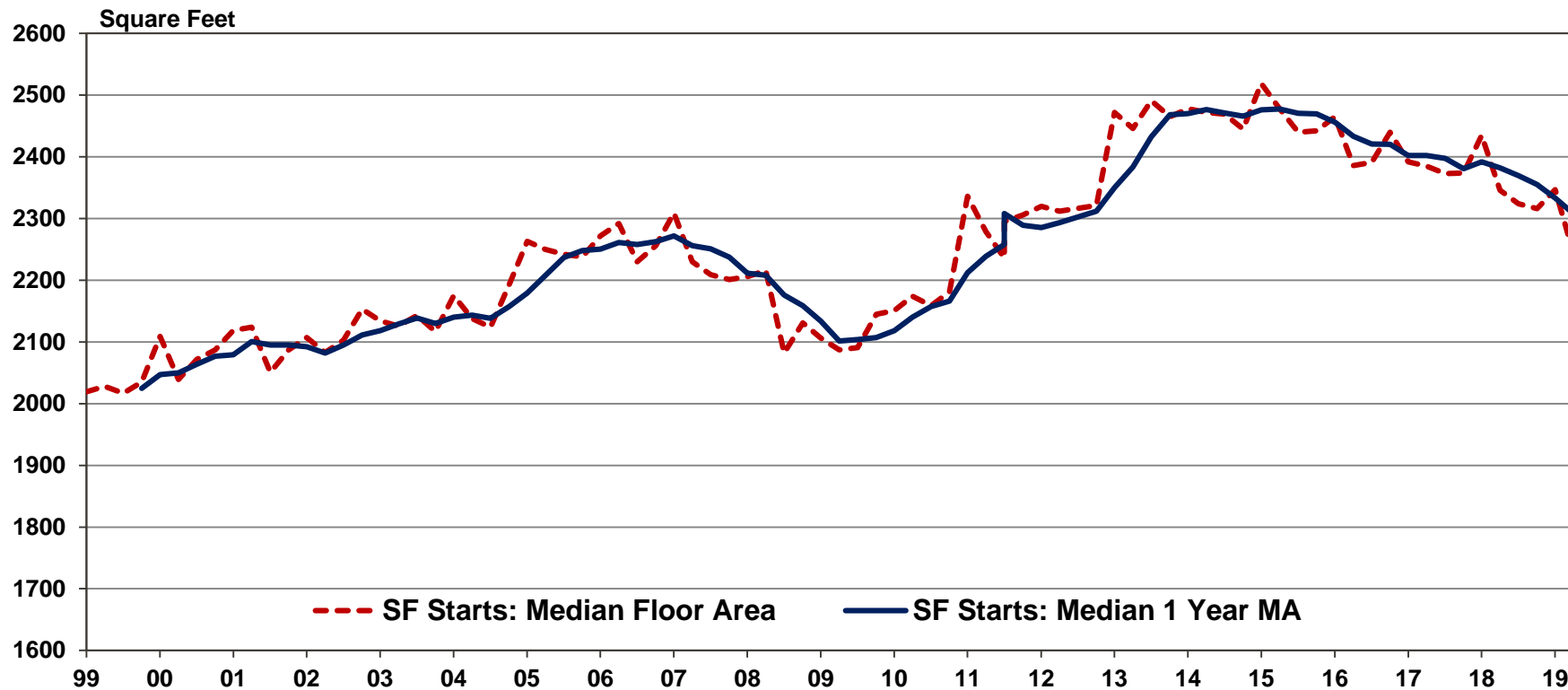
Gap narrowing due to price incentives, more entry-level homes



Source: U.S. Census Bureau (BOC) and National Association of Realtors (NAR)

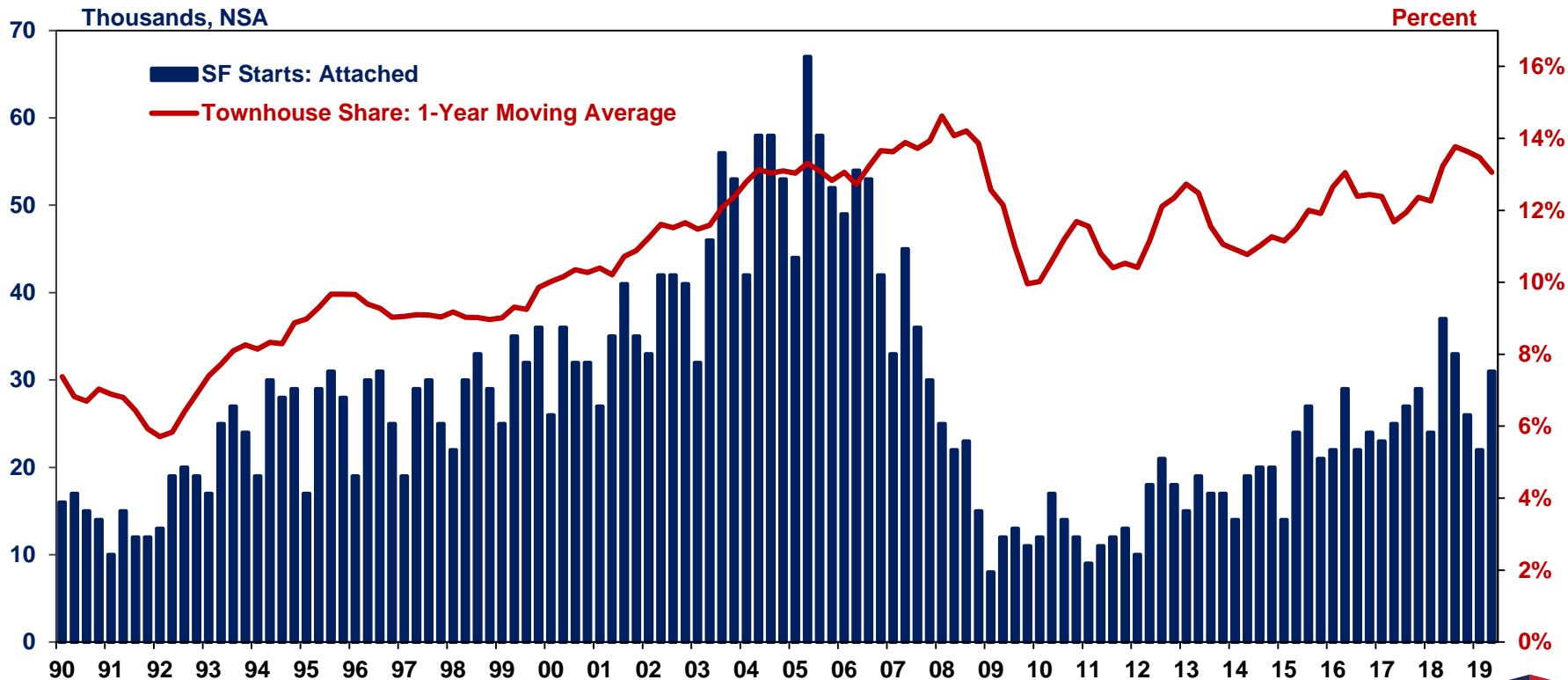
Typical New Home Size

Decline after market shift



Source: U.S. Census Bureau (BOC)

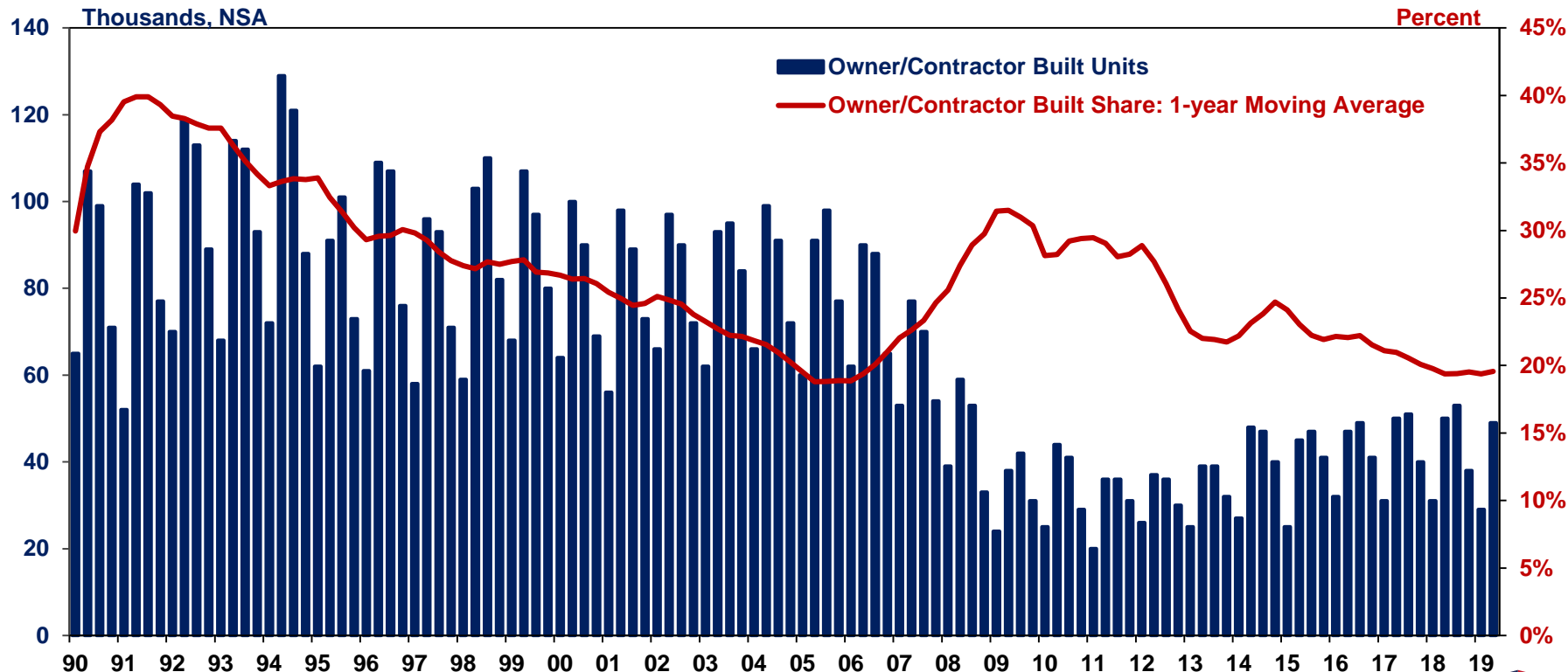
Townhouse Market Expanding



Source: U.S. Census Bureau (BOC)

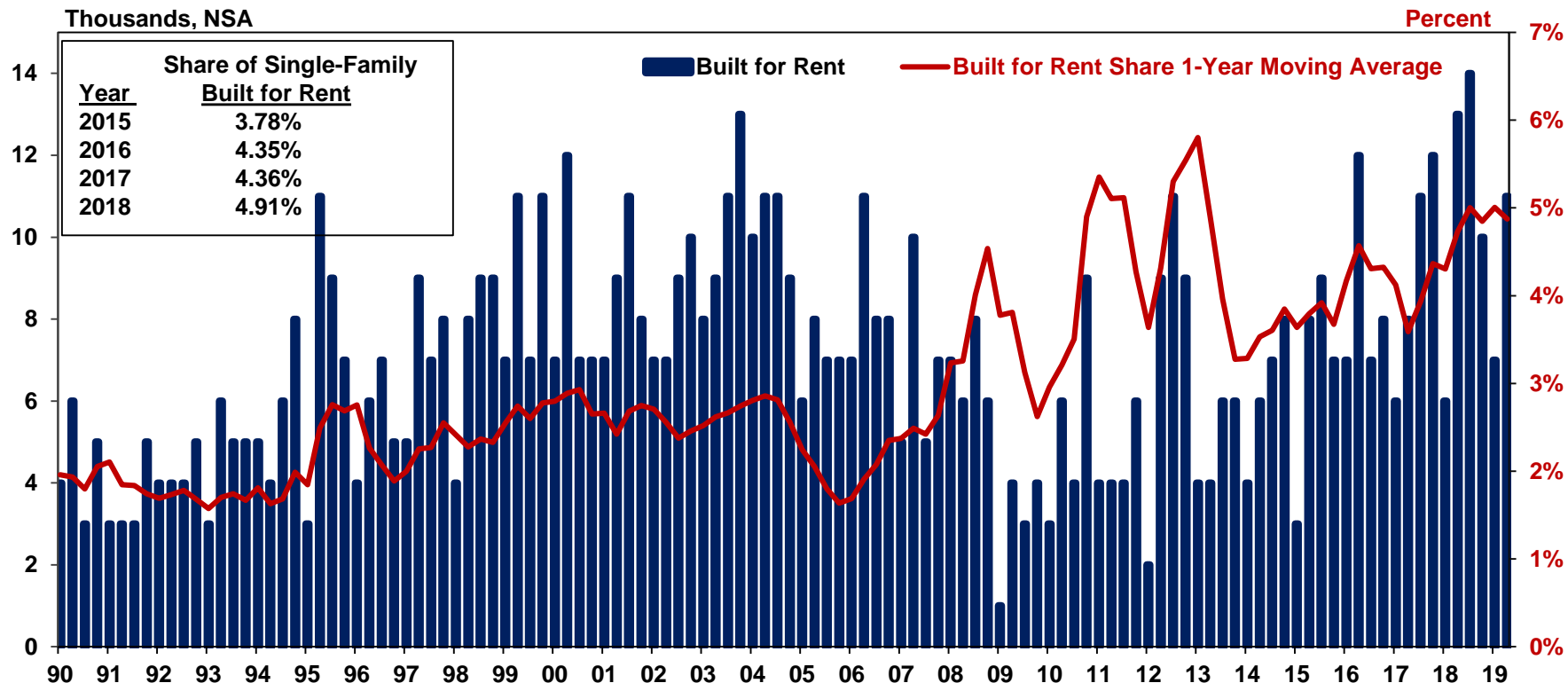
Custom Home Building Market

Flat market conditions



Source: U.S. Census Bureau (BOC)

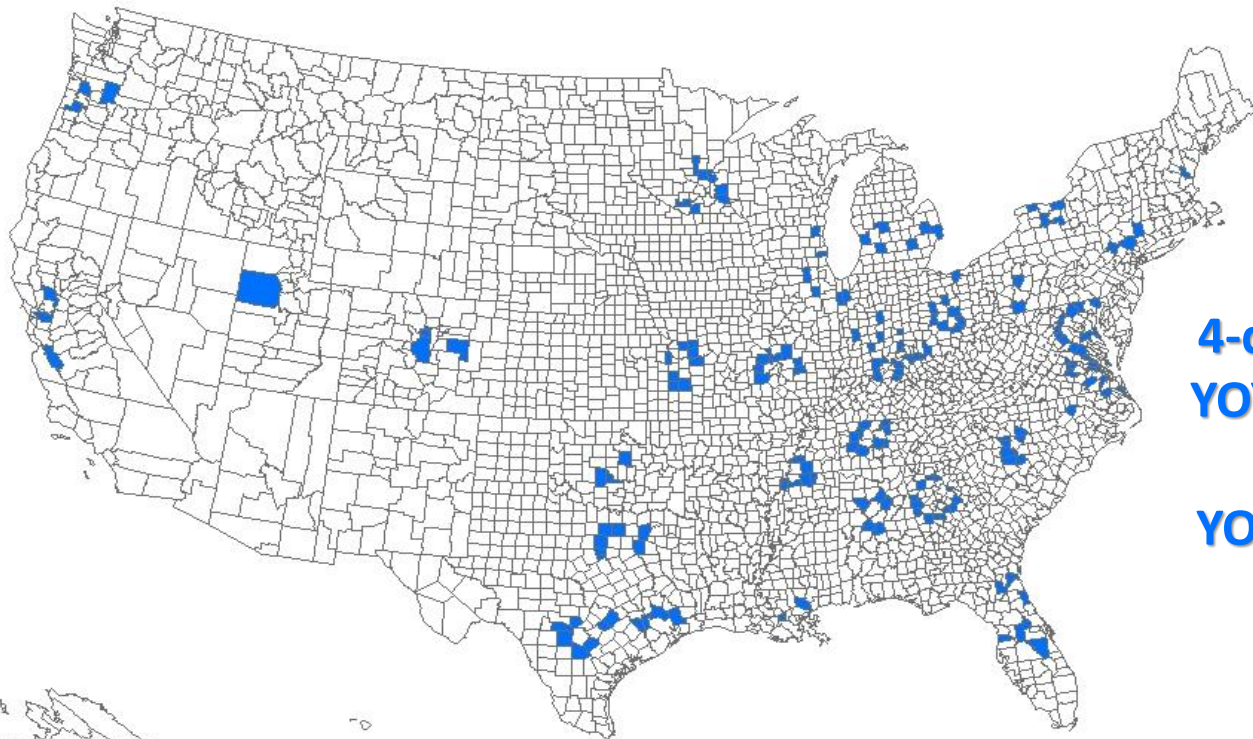
Single-Family Built-for-Rent a Niche Market



Source: U.S. Census Bureau (BOC)

/ New NAHB Home Building Geography Index

8.7% of single-family construction takes place in Large Metro – Outlying County



Q2 2019

4-quarter MA of
YOY growth rate :

0.3%

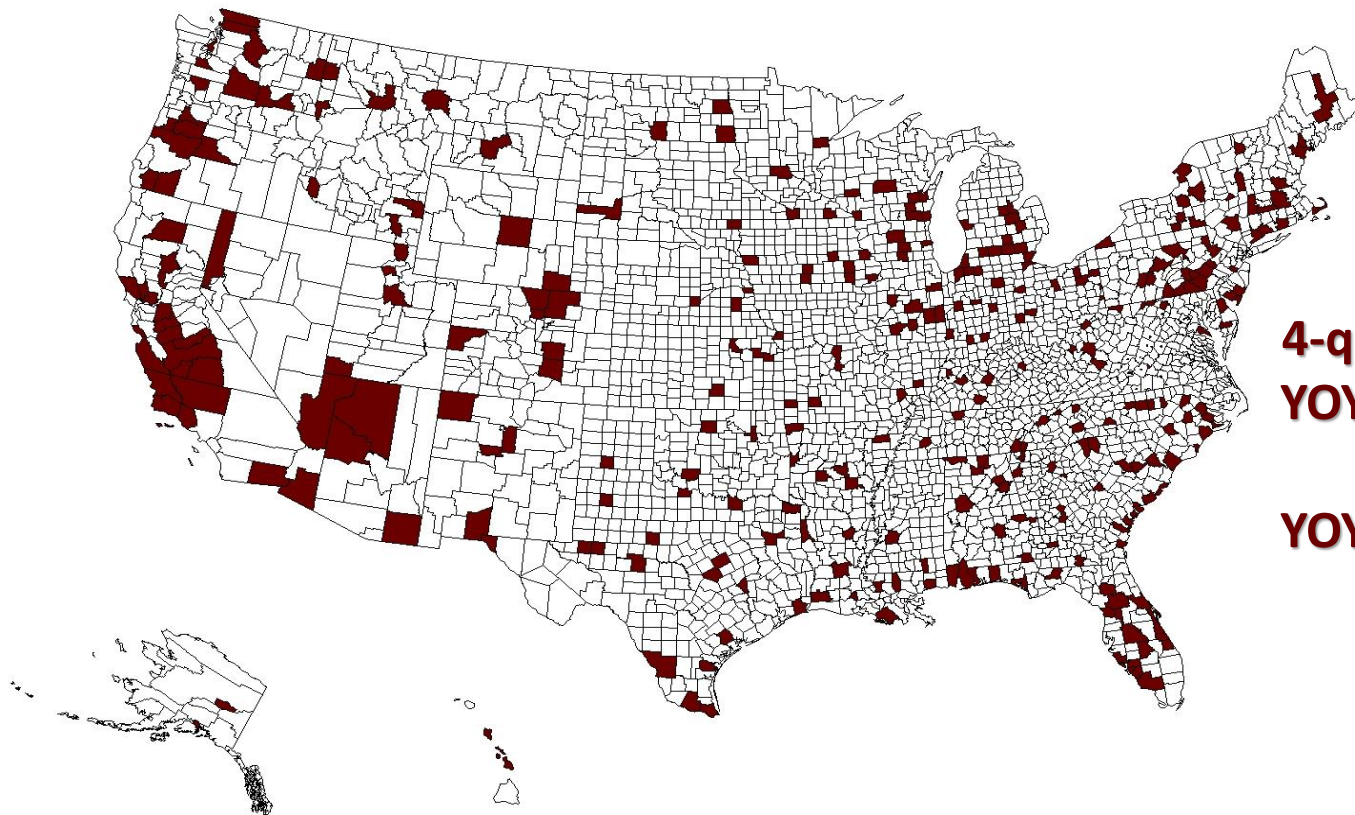
YOY growth rate:

-8.3%

Source: NAHB Analysis of Census data (Building Permits and ACS)

/ New NAHB Home Building Geography Index

*28.6% of single-family construction takes place in **Smaller Metro – Core County***



Q2 2019

**4-quarter MA of
YOY growth rate:**

-0.8%

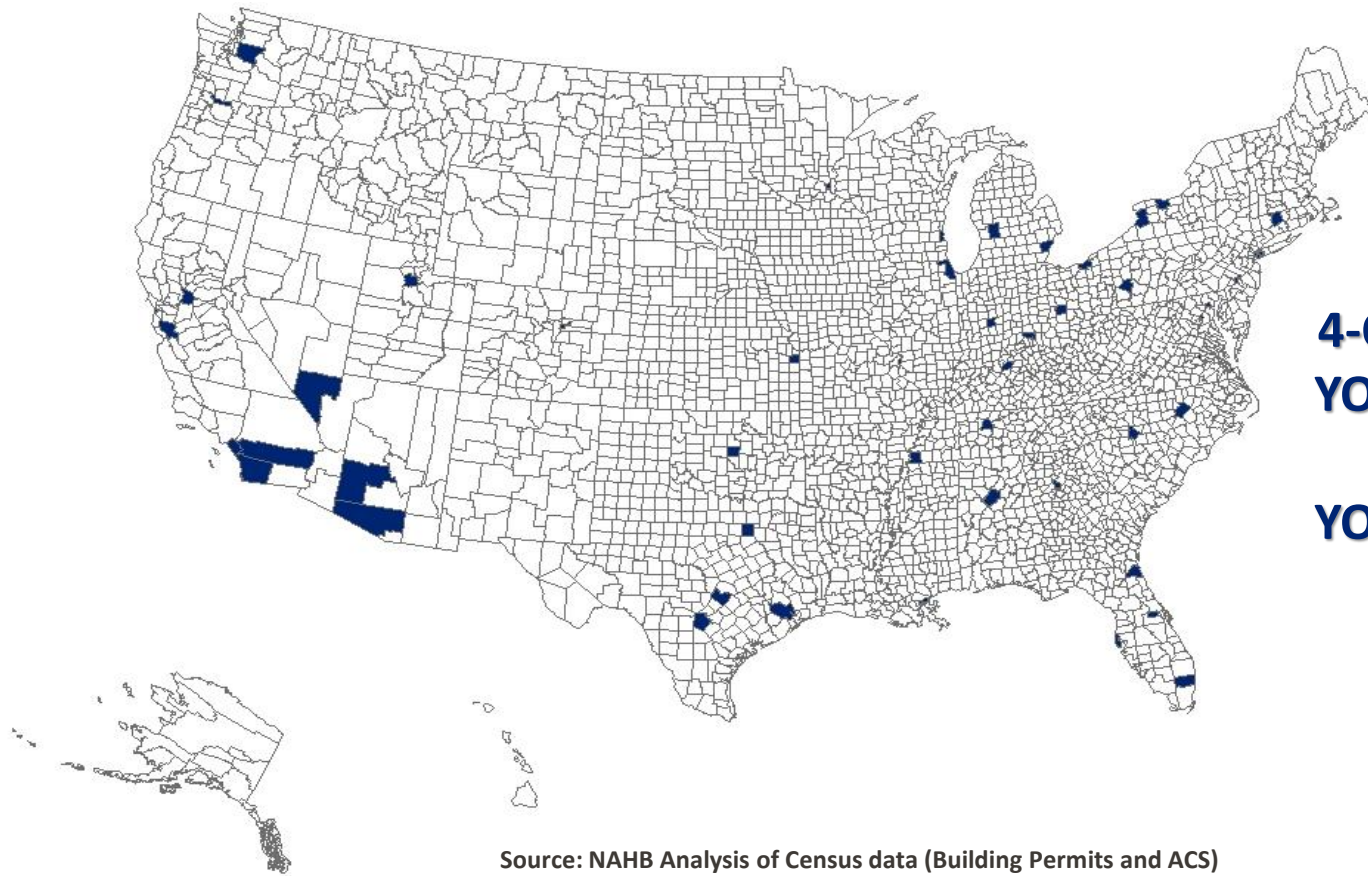
YOY growth rate:

-3.1%

Source: NAHB Analysis of Census data (Building Permits and ACS)

/ New NAHB Home Building Geography Index

18.0% of single-family construction takes place in Large Metro – Core County



Q2 2019

**4-Quarter MA of
YOY growth rate:**

-1.8%

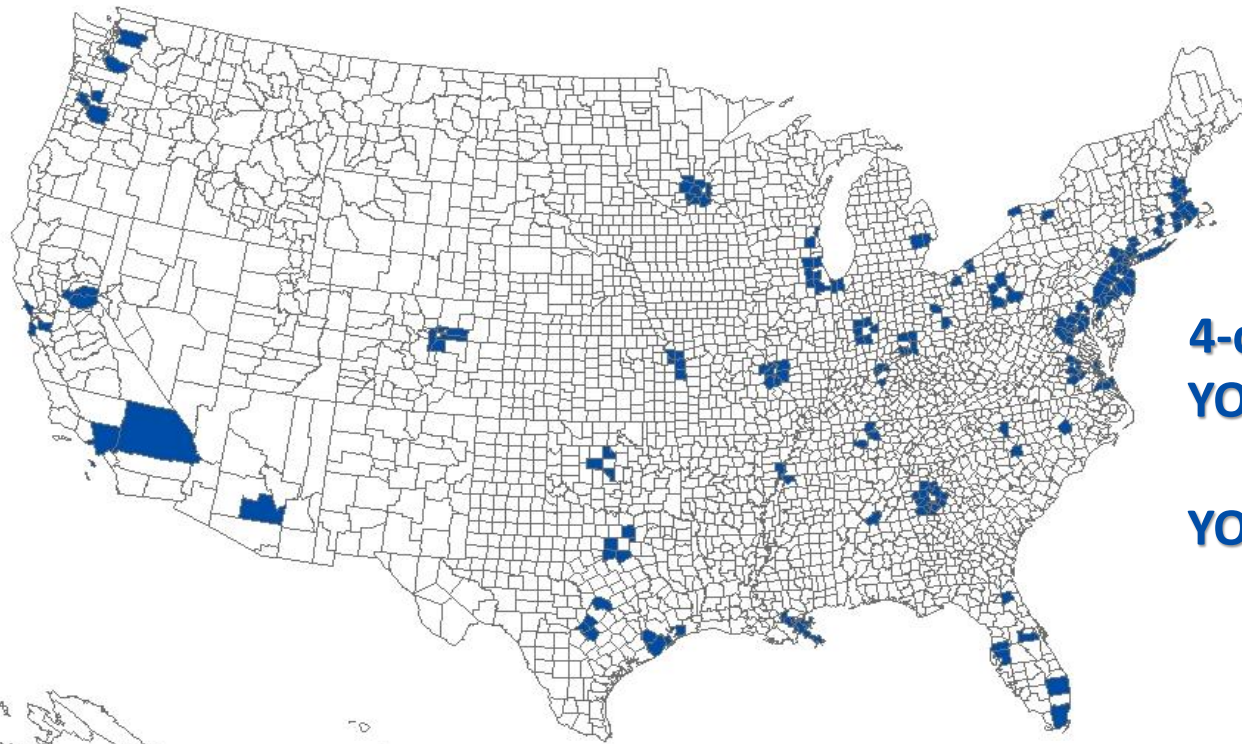
YOY growth rate:

-3.9%

Source: NAHB Analysis of Census data (Building Permits and ACS)

/ New NAHB Home Building Geography Index

26.7% of single-family construction takes place in Large Metro – Suburban County



Q2 2019

**4-quarter MA of
YOY growth rate:**

-3.4%

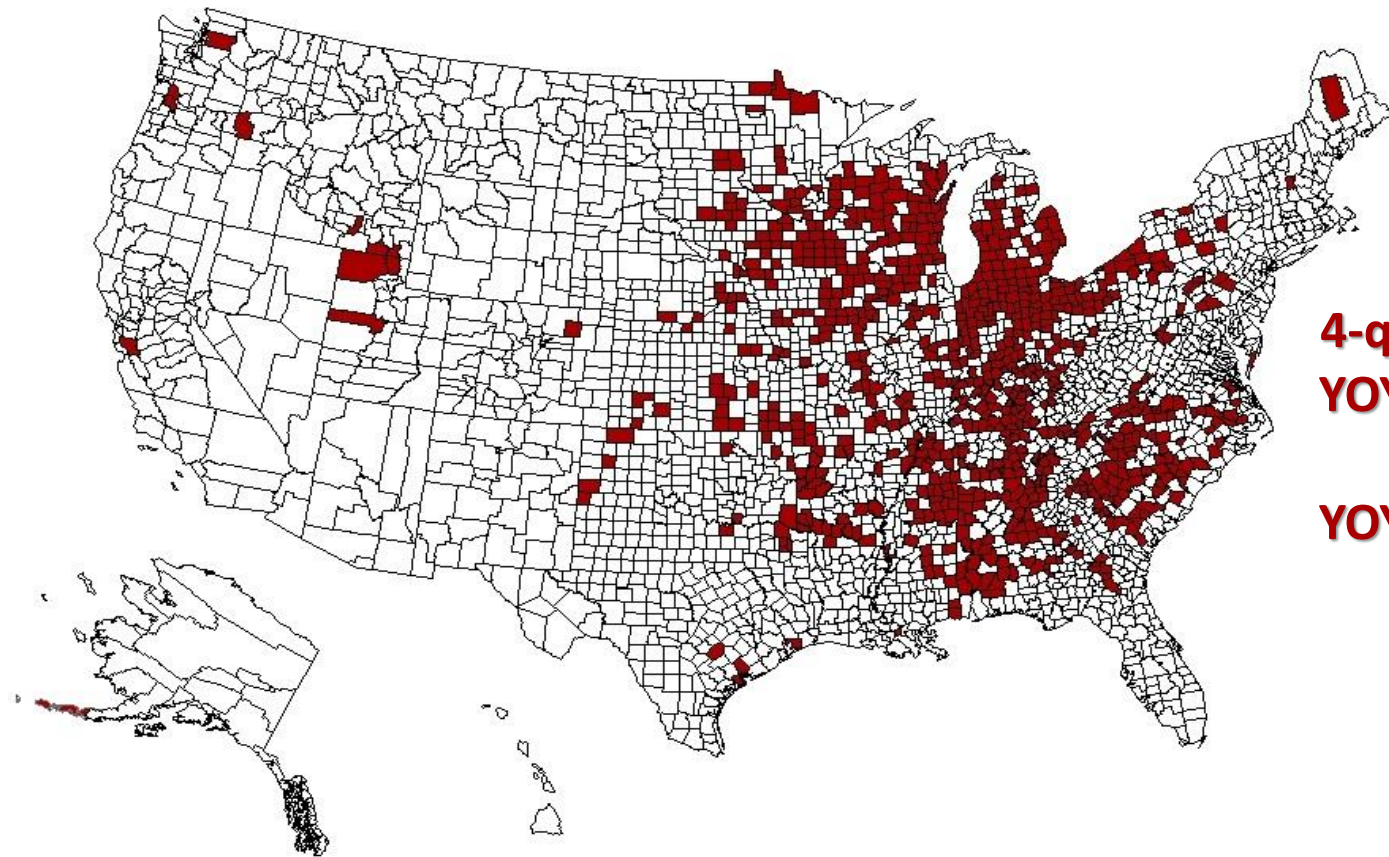
YOY growth rate:

-7.9%

Source: NAHB Analysis of Census data (Building Permits and ACS)

/ New NAHB Home Building Geography Index

*10% of single-family construction takes place in **Manufacturing Counties***



Q2 2019

**4-quarter MA of
YOY growth rate:
-3.8%**

**YOY growth rate:
-1.4%**

Source: NAHB Analysis of Census data (Building Permits and ACS)

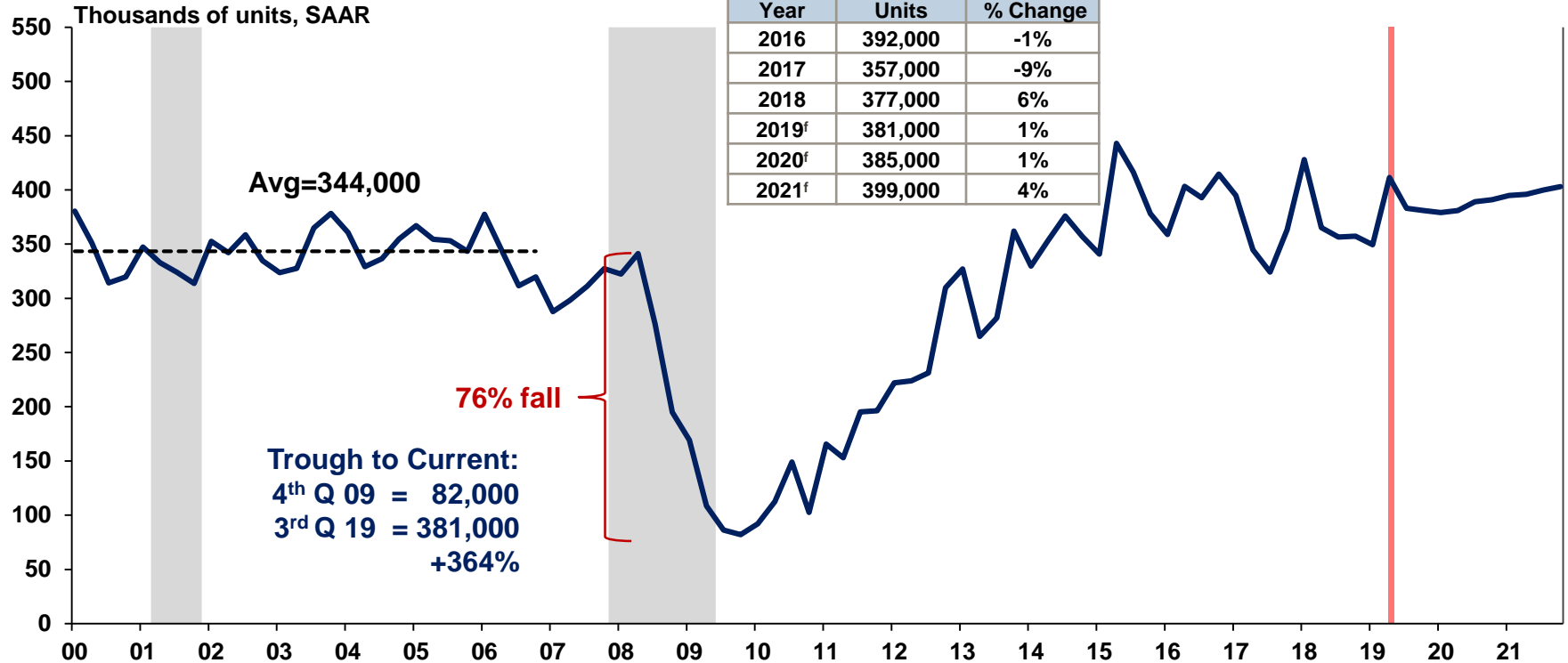
New NAHB Home Building Geography Index (HBGI)

	Multifamily		
	Market Share	YOY Growth Rate	
	(4-Quarter MA)	(Q2 2019)	(4-Quarter MA)
Large Metro - Core County	41%	-0.9%	-0.9%
Large Metro - Suburban County	26%	-12.6%	-6.8%
Large Metro - Outlying County	4%	-17.4%	15.5%
Smaller Metro - Core County	22%	28.3%	7.4%
Smaller Metro - Outlying County	3%	20.1%	8.6%
Micro County	3%	30.1%	12.4%
Non Metro/Micro County	1%	62.7%	39.1%

Source: NAHB Analysis of Census Data (Building Permits and ACS)

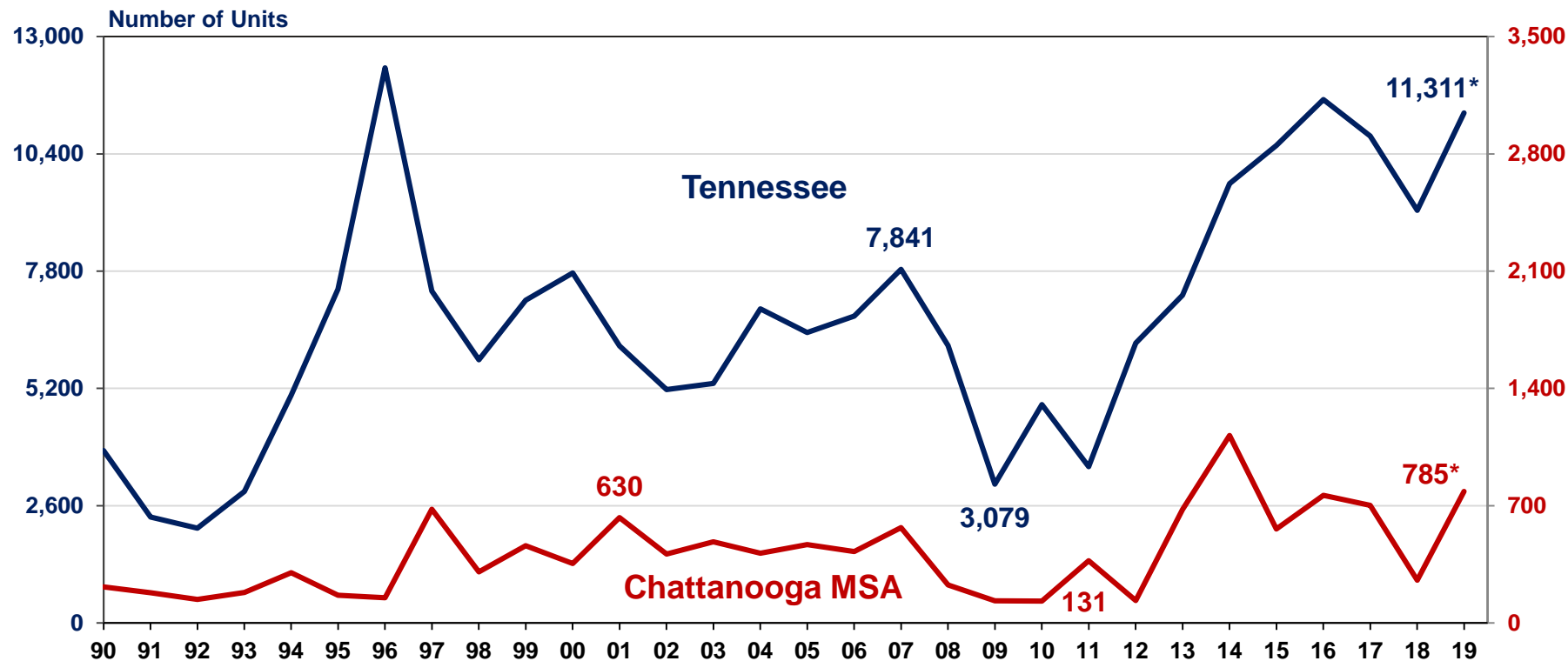
Multifamily Housing Starts

Leveling off



Source: U.S. Census Bureau (BOC) and NAHB forecast

Multifamily Building Permits – TN and Chattanooga MSA

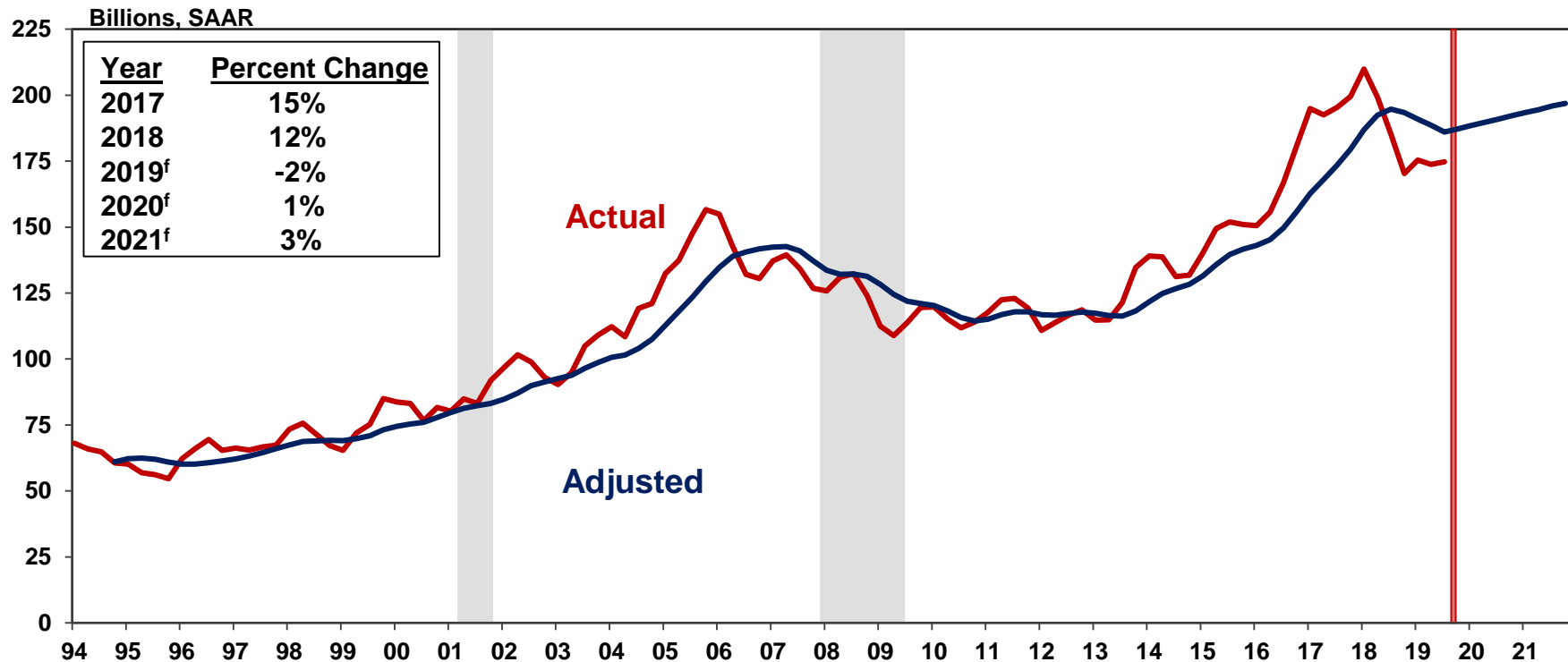


Source: U.S. Census Bureau (BOC)

Note: * 2019 permits are projected based on YTD data.

Residential Remodeling

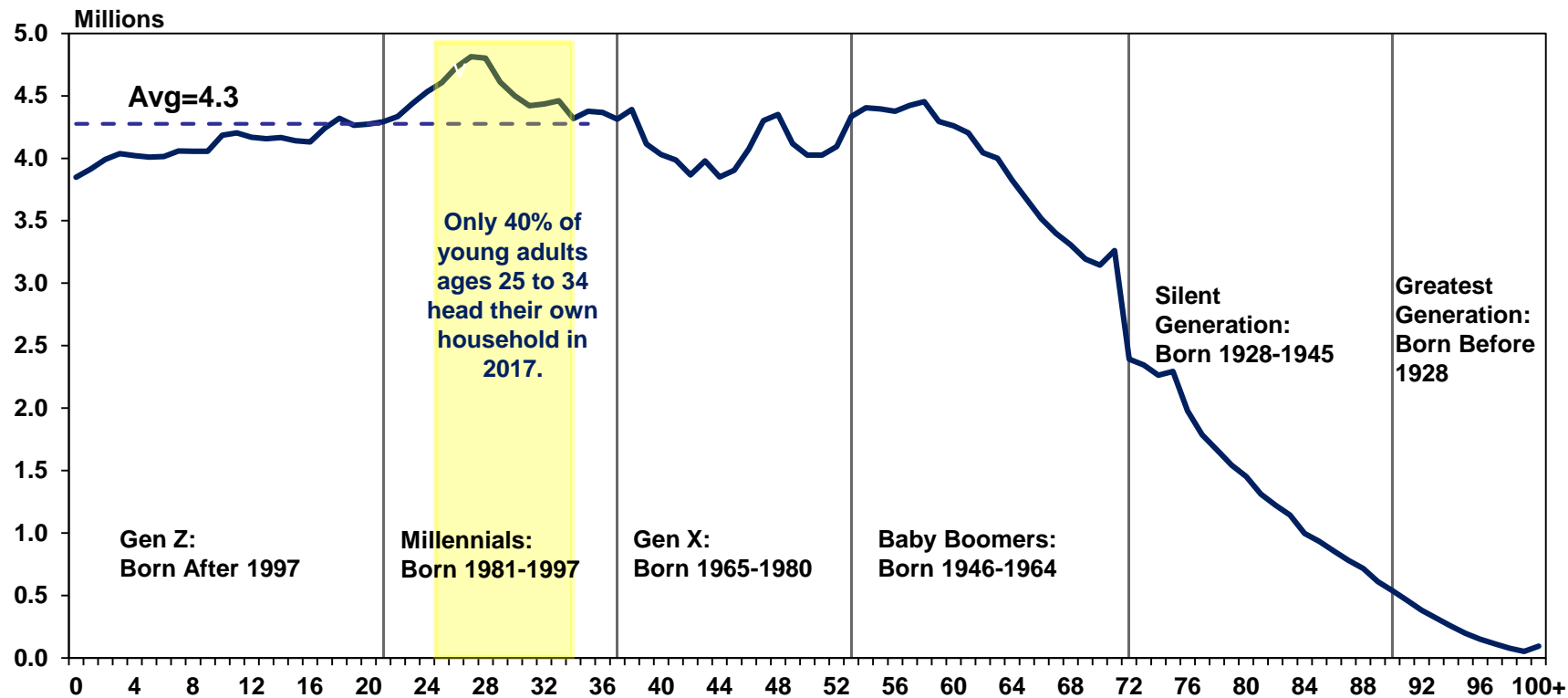
Remodeling market slowing



Source: U.S. Census Bureau (BOC) and NAHB forecast

Note: In the analysis, 2-year moving average is used for adjusted data to smooth the trend

Rising Population Entering Housing Demand Years: 2018



Source: U.S. Census Bureau (BOC).



Home Building Economic Impact

What is the Economic Impact of Home Building

NAHB impact developed in 1996

More than 800 studies, including for universities
and affordable housing groups

2002: adapted for Low-Income Housing
Tax Credit rental developments

2005: adapted for remodeling analysis

What is the Economic Impact of Home Building?

Study of Chattanooga, TN-GA MSA

- Hamilton County (TN)
- Marion County (TN)
- Sequatchie County (TN)
- Catoosa County (GA)
- Dade County (GA)
- Walker County (GA)

1,479 single-family home permits in Chattanooga MSA



Local Economic Impact of Single-family Home Building

1st - Construction phase

- Jobs, Materials, Fees, Taxes

2nd - Ripple effect from construction phase

- Wages spent in local economy

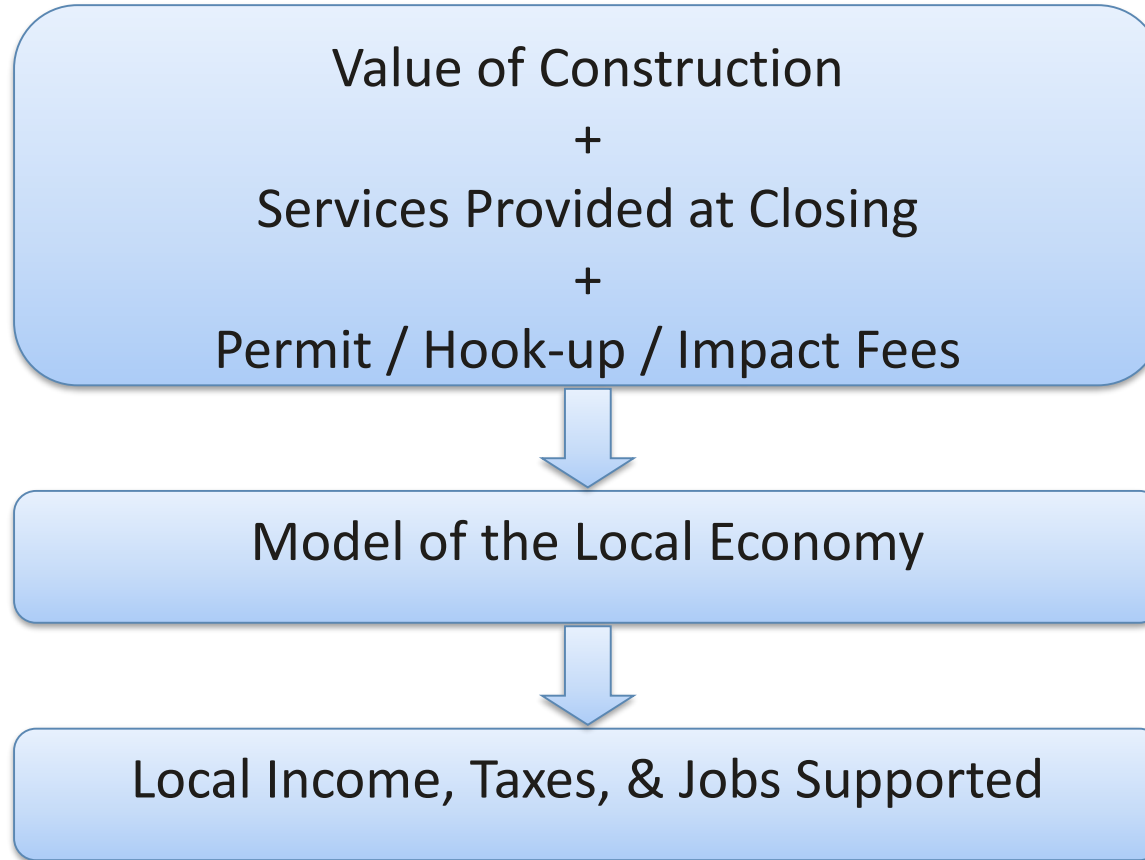
3rd - Occupancy phase

- Earnings spent in the local economy

Assumptions of the Model

<u>Inputs To Model</u>	<u>Single-family</u>
Average house price:	\$245,000
Average raw lot cost:	\$40,000
Permits/Infrastructure:	\$1,000
Annual property taxes:	\$3,108

Phase I -- CONSTRUCTION



FIRST YEAR IMPACT: Single-family Construction – 1,479 Homes

Local Income	Business Owners' Income	Local Wages and Salaries	Local Taxes ¹	Local Jobs Supported
\$176,802,300	\$60,267,300	\$116,535,100	\$15,217,900	2,243



INCLUDING:

\$1.5 M permit and impact fees

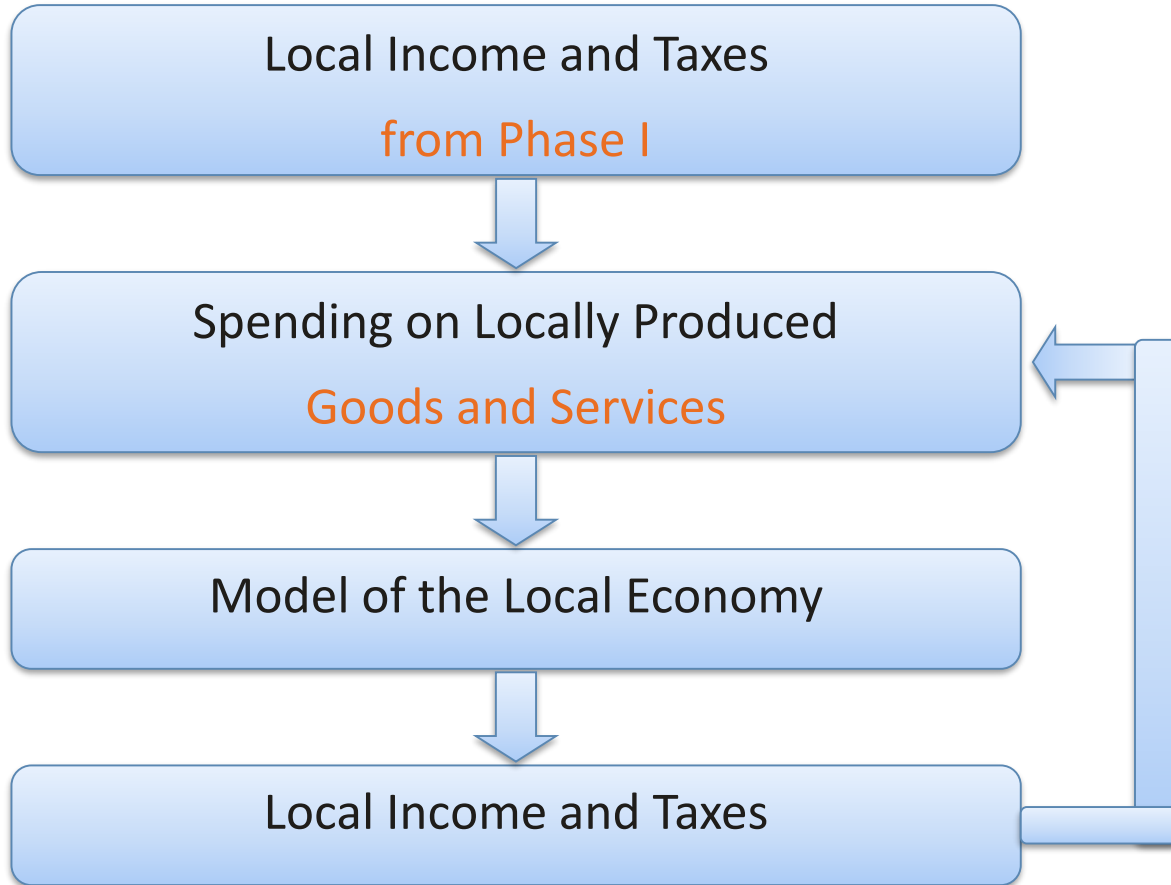
1,650 jobs in Construction

297 jobs in Wholesale and Retail Trade

158 jobs in Business and Professional Services

* One job represents enough work to keep one worker employed full-time for a year.

Phase II -- RIPPLE



FIRST YEAR IMPACT: Single-Family Ripple

Local Income	Business Owners' Income	Local Wages and Salaries	Local Taxes ¹	Local Jobs Supported
\$77,717,100	\$18,274,300	\$59,442,900	\$19,823,900	1,459

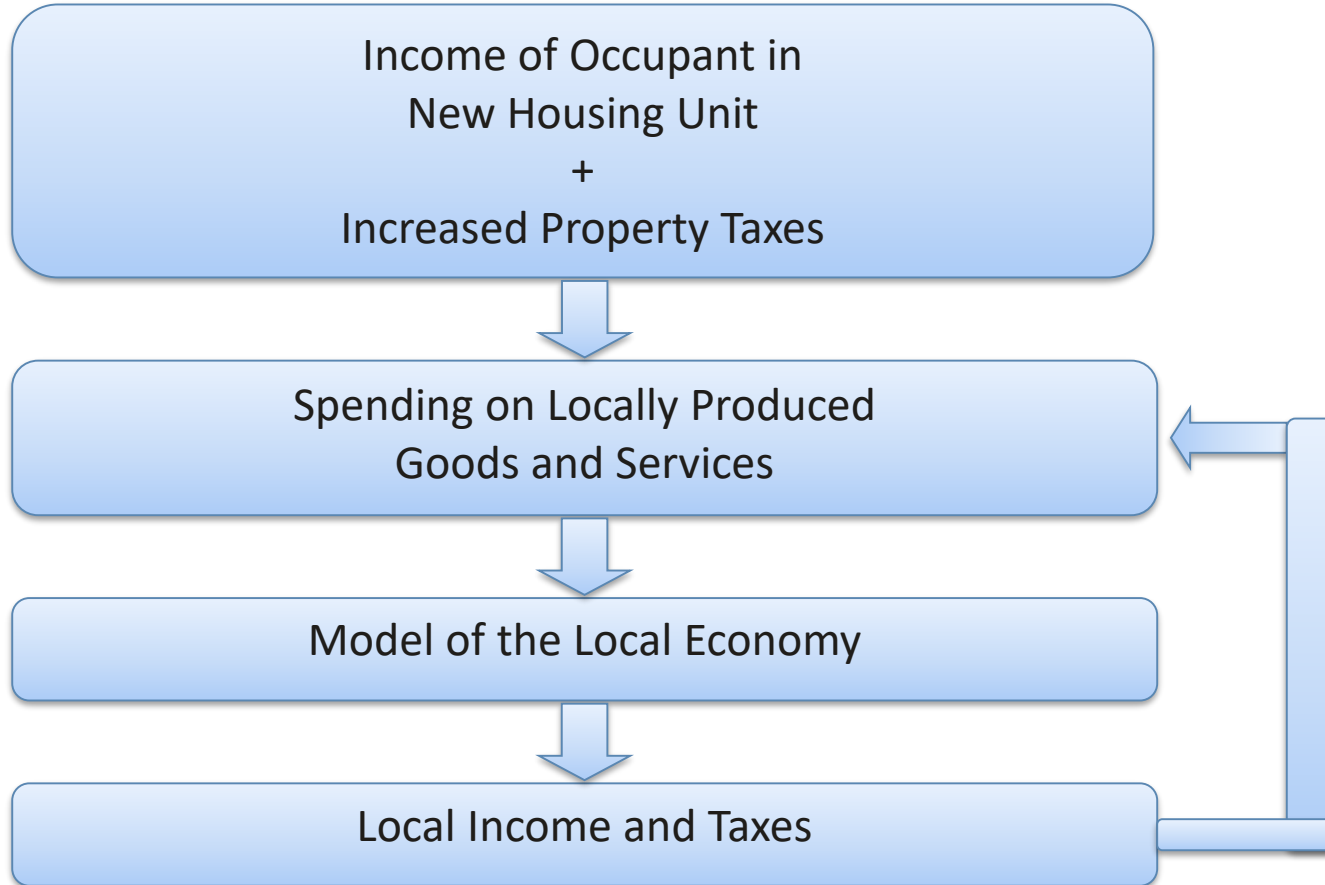
INCLUDING:

341 jobs in Wholesale and Retail Trade

200 jobs in Eating and Drinking Places

179 jobs in Local Government

Phase III -- OCCUPANCY



ONGOING Single-Family -- ANNUAL EFFECT

Local Income	Local Business Owners' Income	Local Wages and Salaries	Local Taxes ¹	Local Jobs Supported
\$48,924,500	\$11,261,700	\$37,663,100	\$17,801,300	934



\$3.8M property tax

INCLUDING:

219 jobs in Wholesale and Retail Trade
140 jobs in Eating and Drinking Places
123 jobs in Local Government



New Homes Require

Fire and police protection

Garbage collection

Parks and recreational opportunities

Roads

Correctional facilities

Primary and secondary education

Etc.

Data: Local and Federal Government

Required Current Expenses

Total Annual Local Government Expenses per Single-family Housing Unit

Education	\$1,445
Police Protection	\$494
Fire Protection	\$303
Corrections	\$211
Streets and Highways	\$51
Water Supply	\$97
Sewerage	\$109
Health Services	\$2,360
Recreation and Culture	\$196
Other General Government	\$779
Electric Utilities	\$1,415
Gas Utilities	\$21
Public Transit	\$10
Total	\$7,491

Required Capital per Unit

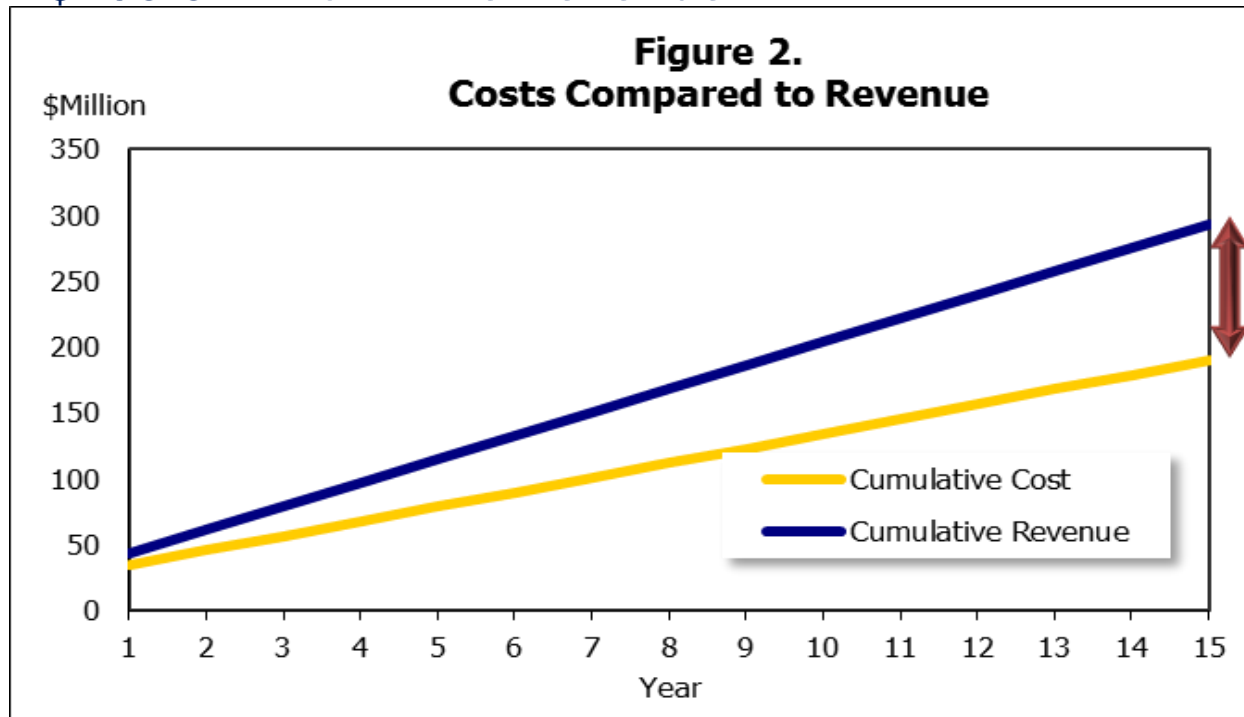
Schools	\$5,231
Hospitals	\$398
Other Buildings	\$2,652
Highways and streets	\$2,317
Conservation & development	\$1
Sewer systems	\$1,466
Water supply	\$2,021
Other structures	\$4,456
Equipment	\$248
Total	\$18,790

Net Economic Impact Estimates

1,479 Single-Family Homes (3,702 Phase I and II jobs, 934 Phase III jobs)

\$293.1 million in revenue; \$189.8 million in costs

\$103.3 million in net revenue



\$103.3 million

Thank you

Questions?

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eyeonhousing.org
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