

Housing Affordability and Supply-Chain Challenges

HBA of Greater Cincinnati
HBA of Dayton
November 23, 2021

Robert Dietz, Ph.D.
NAHB Chief Economist



Macro/Housing Outlook



**Vaccine/natural immunity are supporting economic growth
Delta wave eased but winter increases occurring**



**Solid growth in 2021, with increases for interest rates
Growth slowing in 2022 and 2023**



**Building materials a key concern
Supply-chains are a mess**



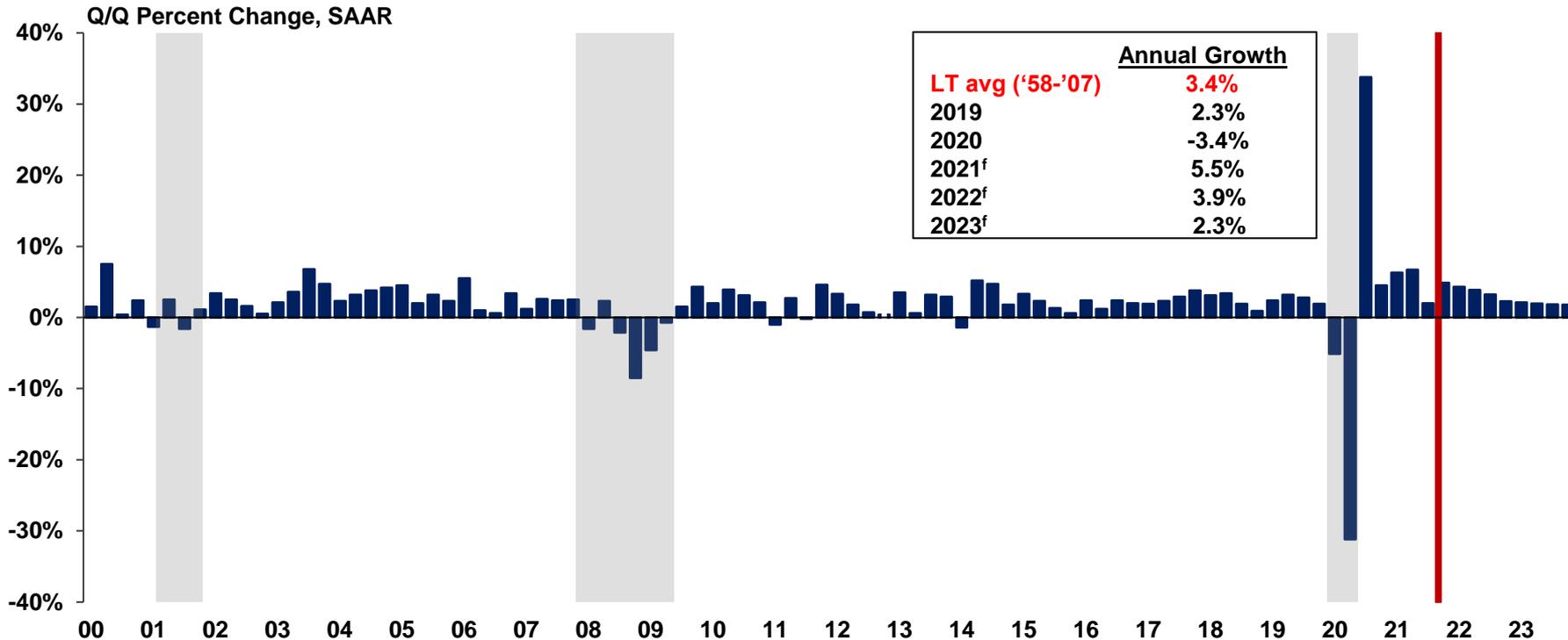
**Single-family, remodeling and multifamily construction gains for 2021
Telecommuting and other factors driving a suburban shift**



**Housing affordability risks erosion in 2022 and 2023
Communities with ability to add affordable housing will grow**

GDP Growth – Solid Growth for 2021

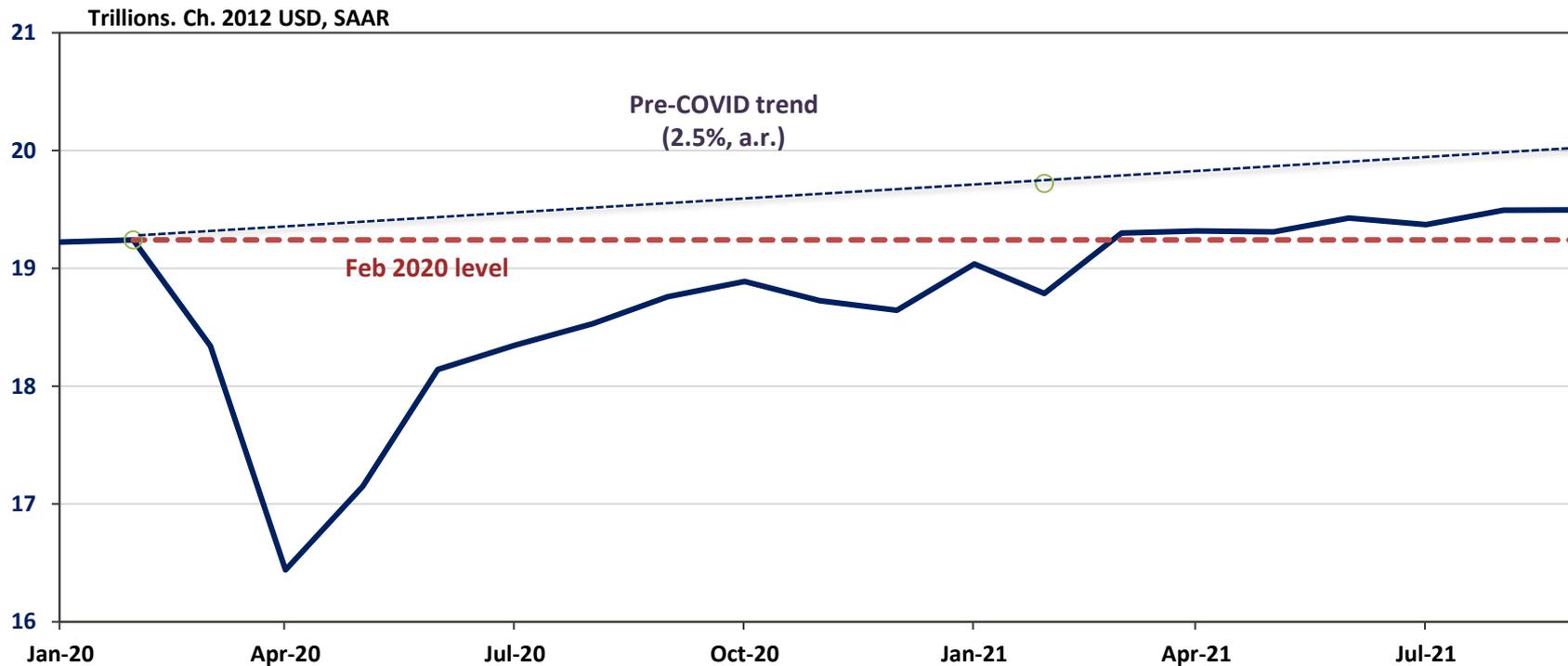
Growth slowing over next two years



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

Has the Economy Recovered?

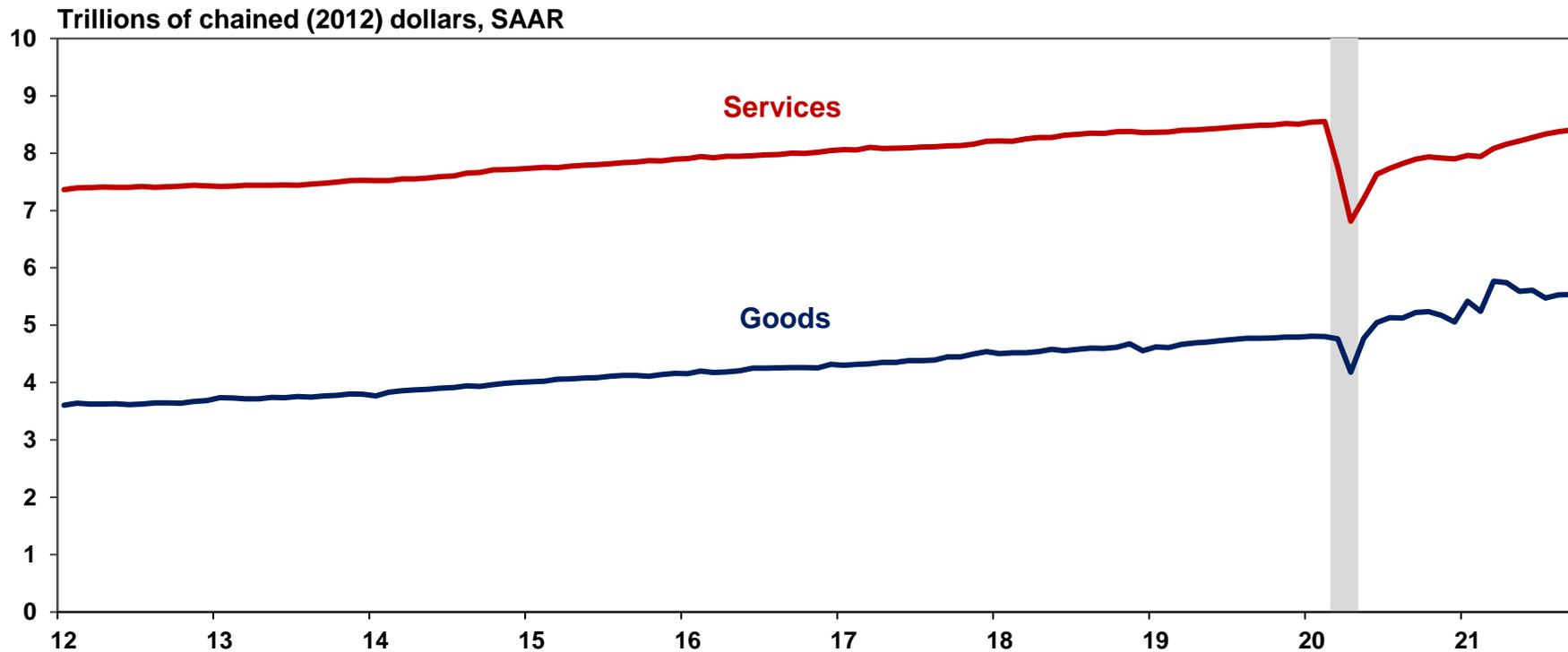
GDP already above Feb 2020 level



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

Monthly Goods and Services: GDP Data

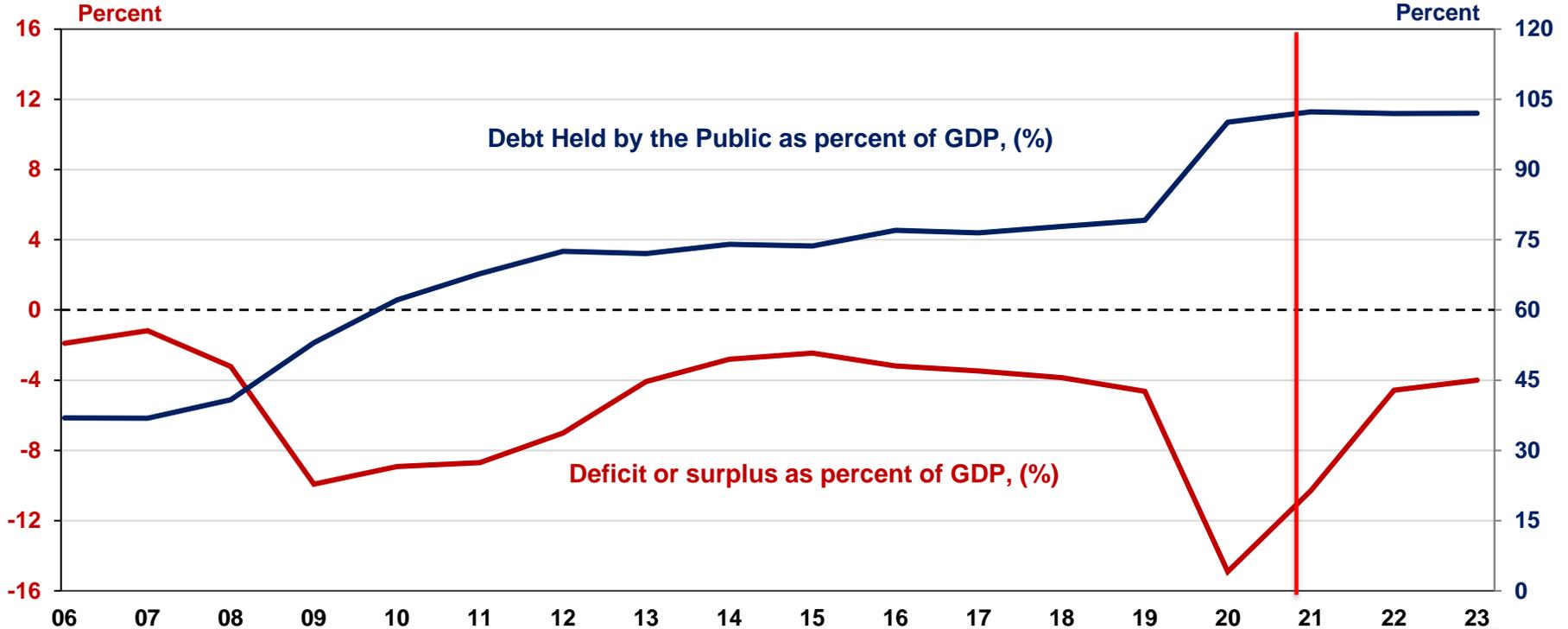
Services still down, goods higher



Source: U.S. Bureau of Economic Analysis (BEA) - National Income and Product Accounts (NIPA).

Government Deficits Growing

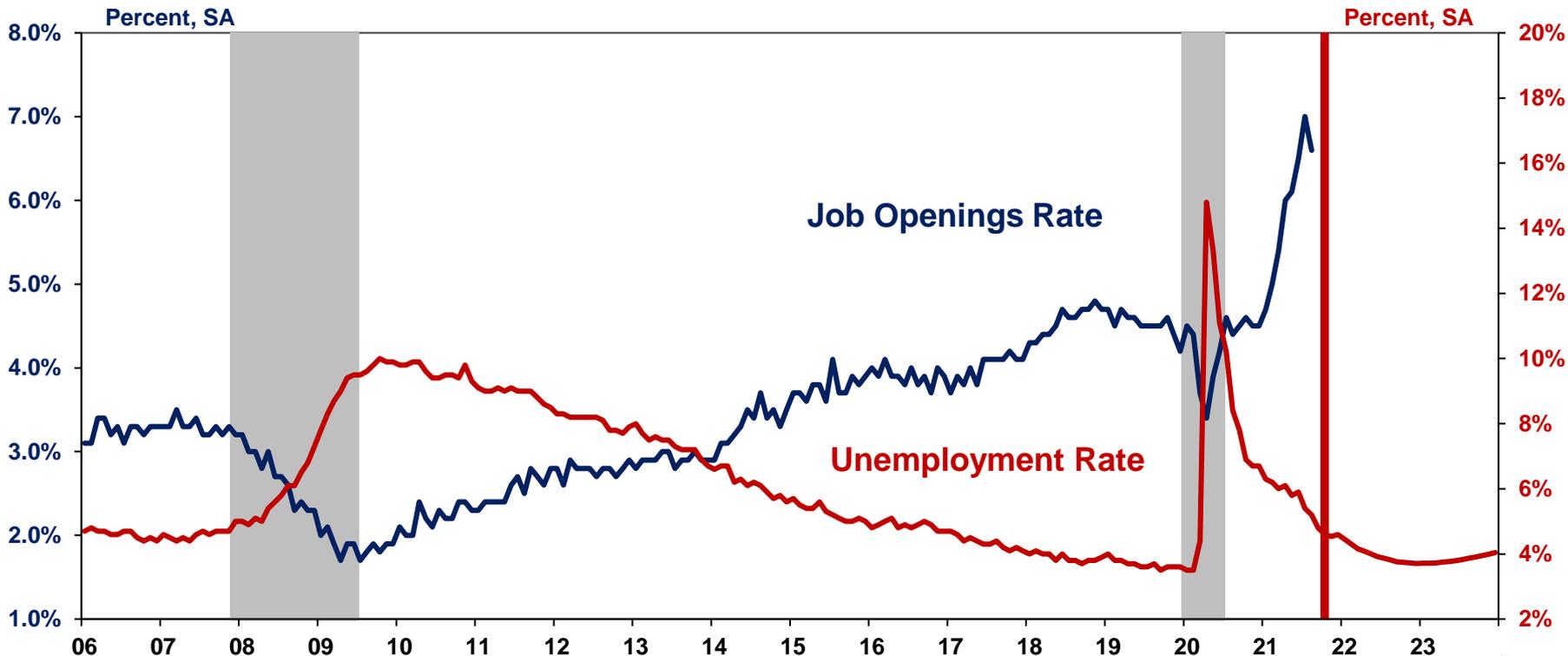
Reaching unsustainable levels



Source: Congressional Budget Office (CBO).

Rise of Job Openings

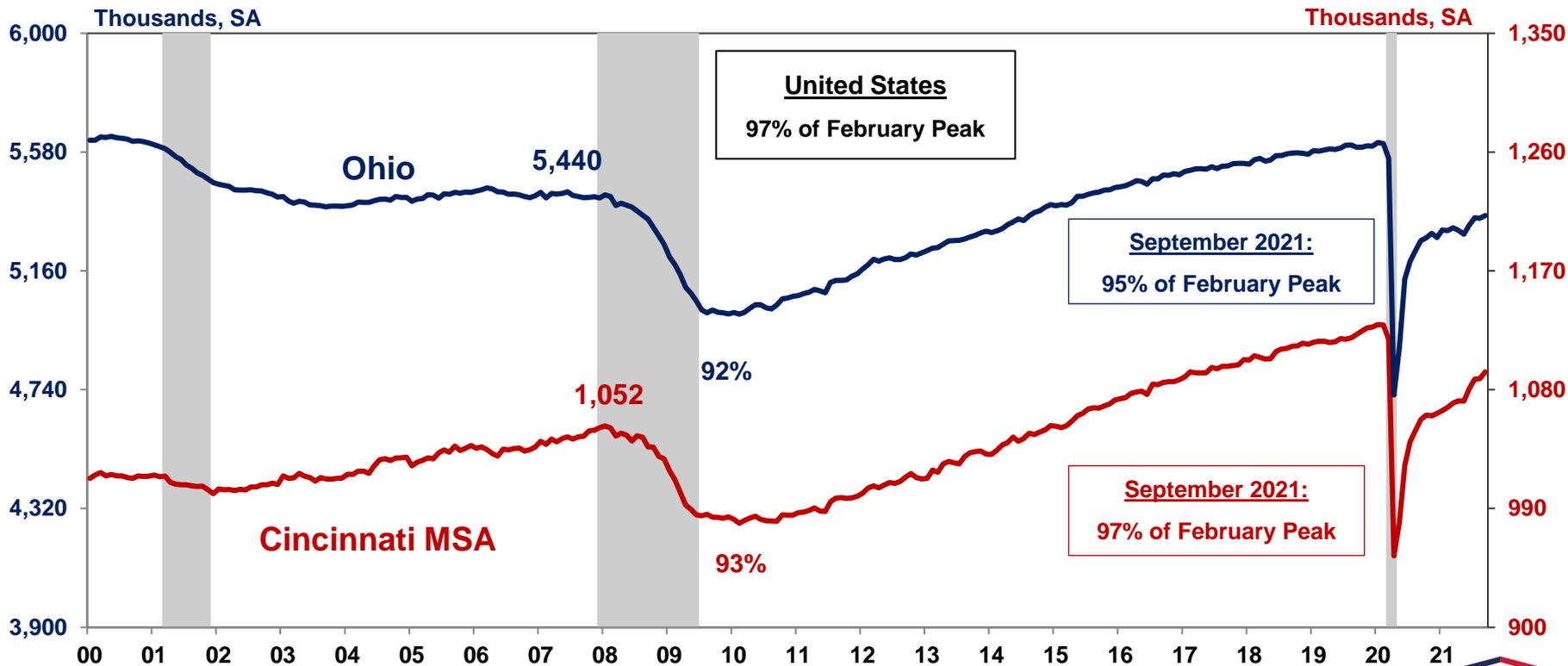
More than 10 million open jobs



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

Payroll Employment

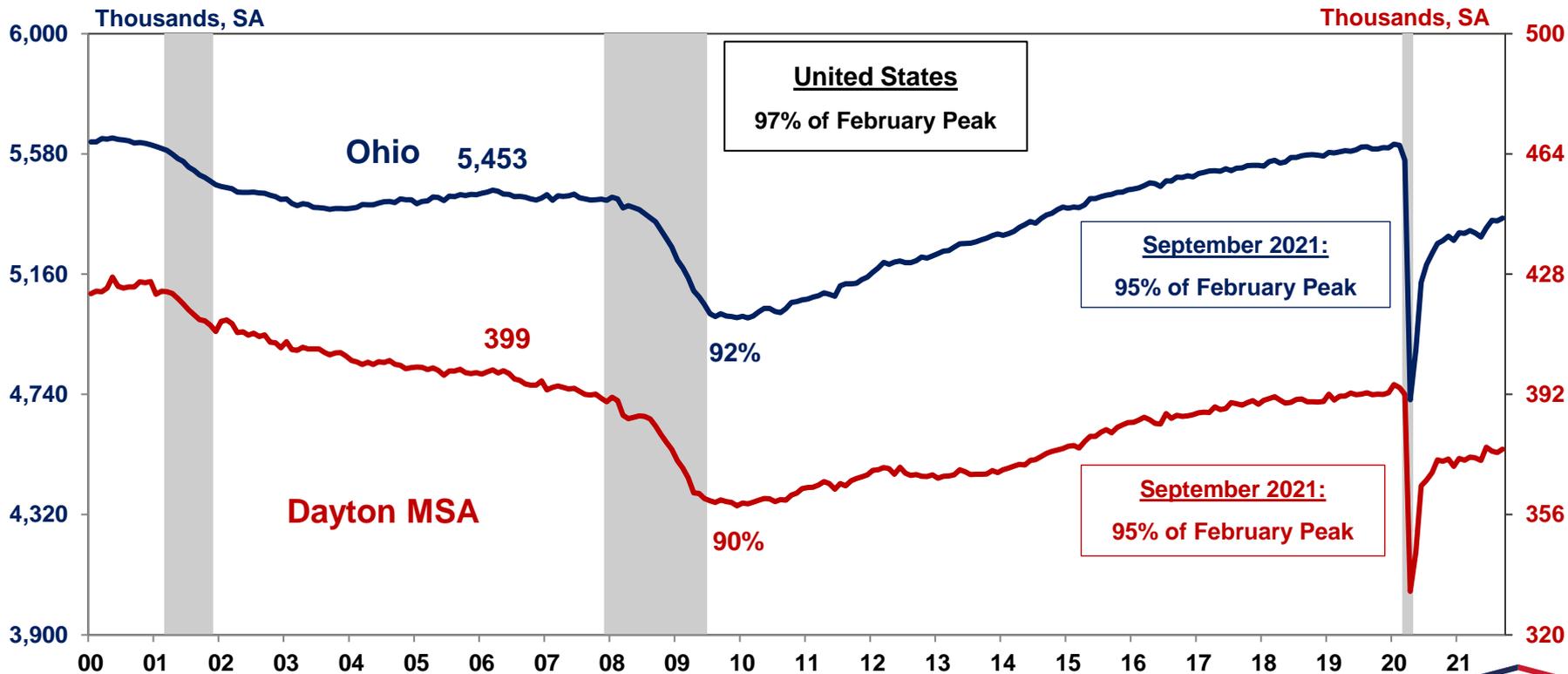
Cincinnati MSA recovering from COVID-19 recession



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

Payroll Employment

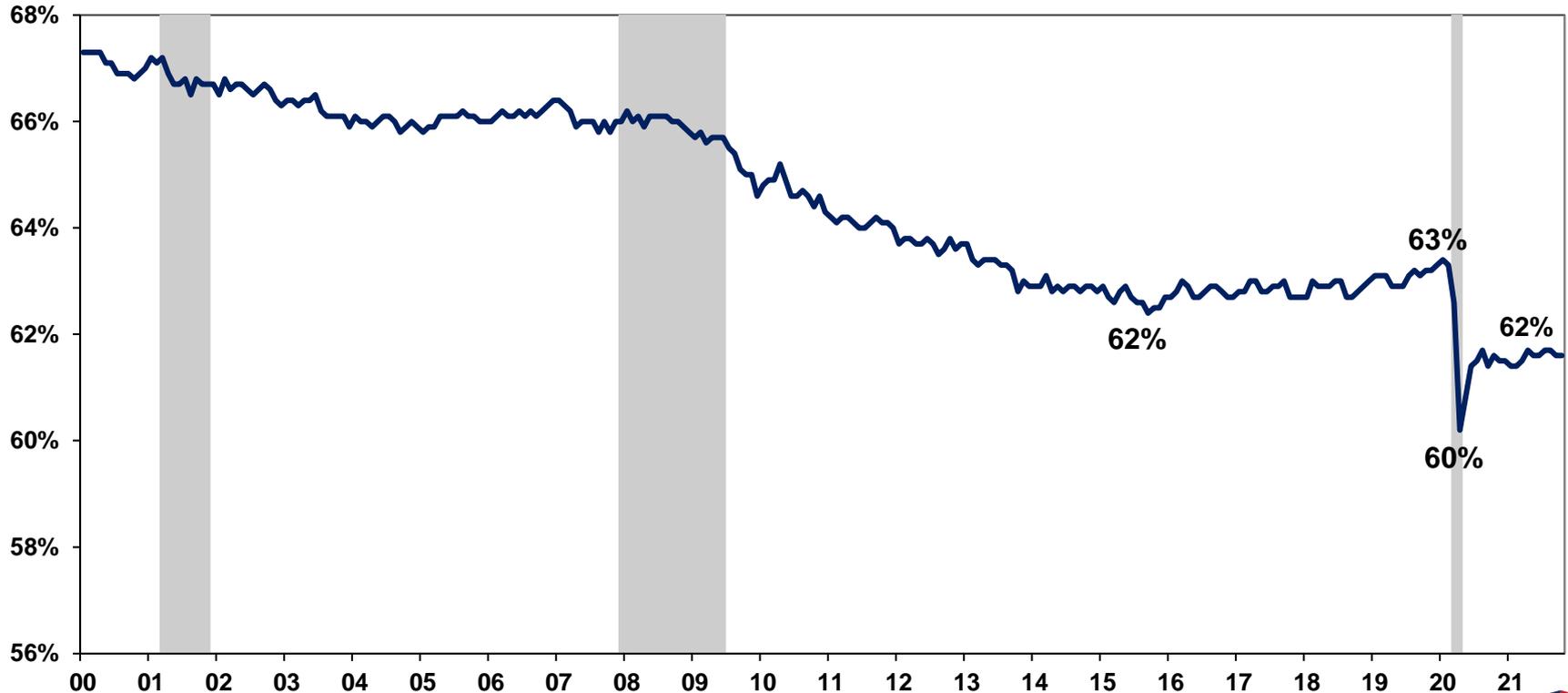
Dayton MSA recovering from COVID-19 recession



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

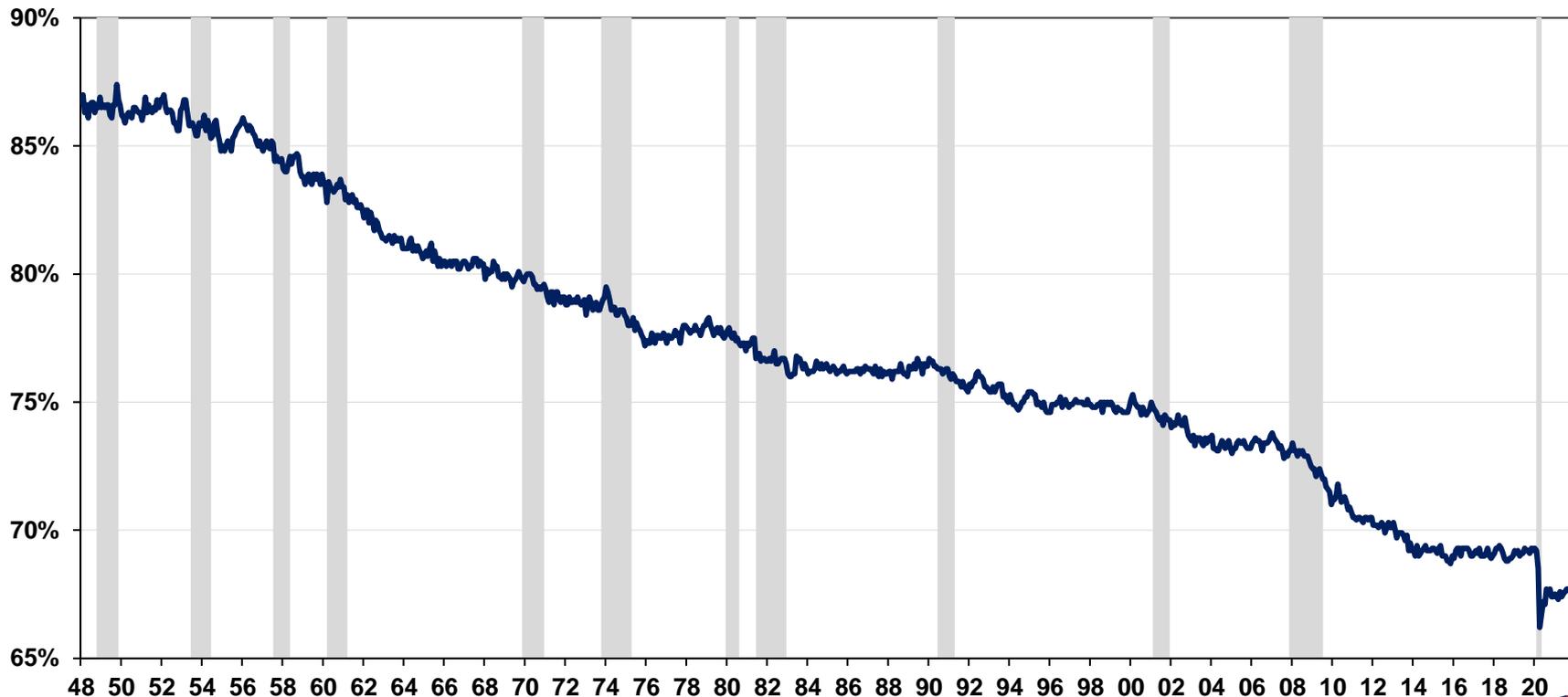
Labor Force Participation Rate

Labor force participation must be repaired as part of job market recovery



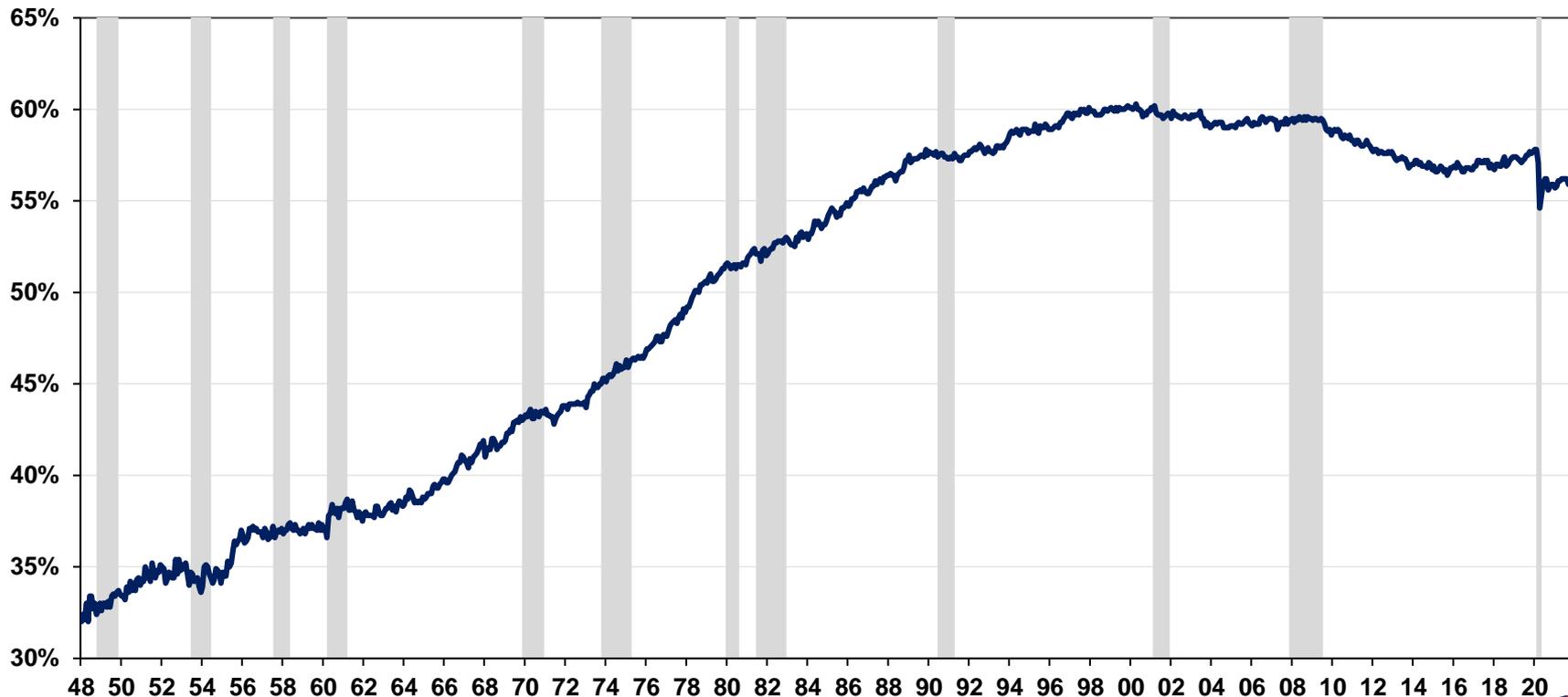
Source: U.S. Bureau of Labor Statistics (BLS).

Labor Force Participation Rate -- Men



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

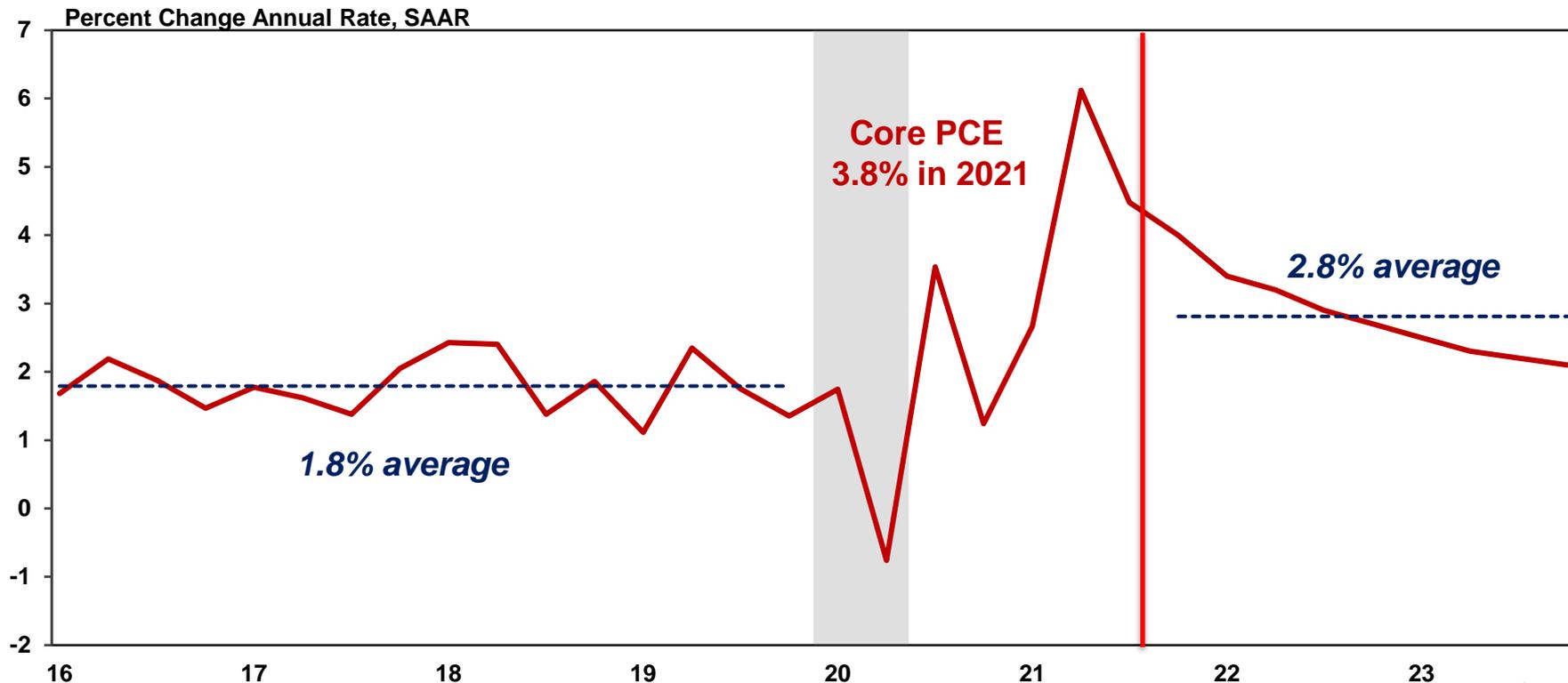
Labor Force Participation Rate -- Women



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

Core Inflation

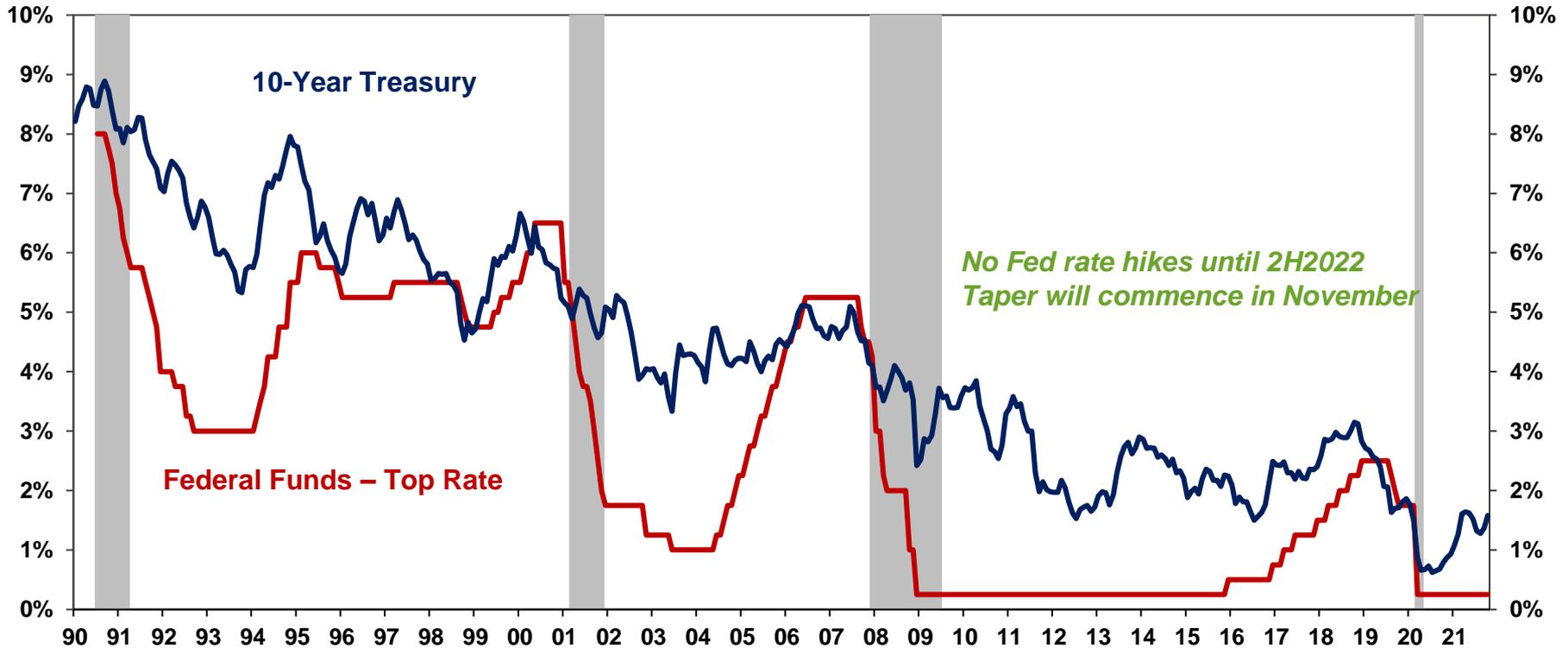
Inflation surged to a 31-year high in October



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

Fed Funds Rate – Fed All In on Supporting Economy

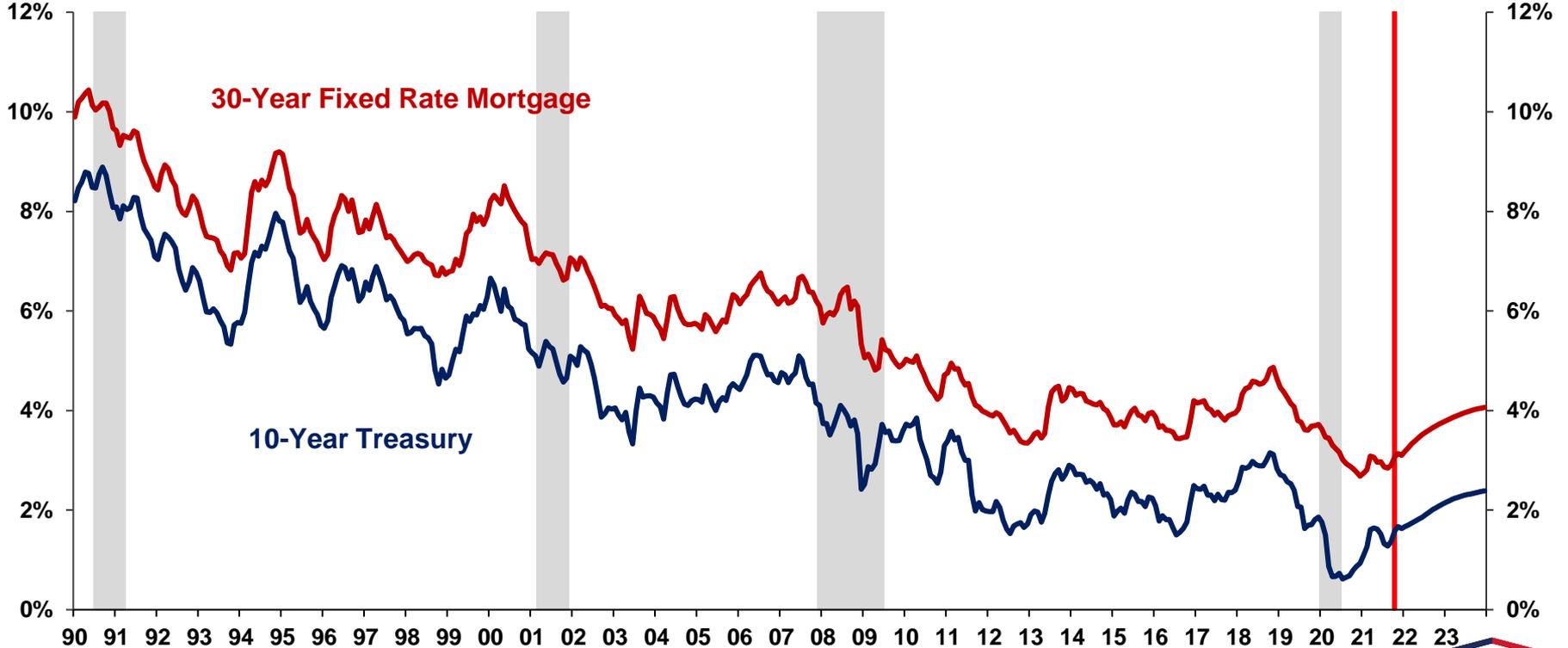
Effective 0% fed funds rate and \$40 billion a month in MBS purchases supporting housing



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

Interest Rates Will Trend Higher with Recovery

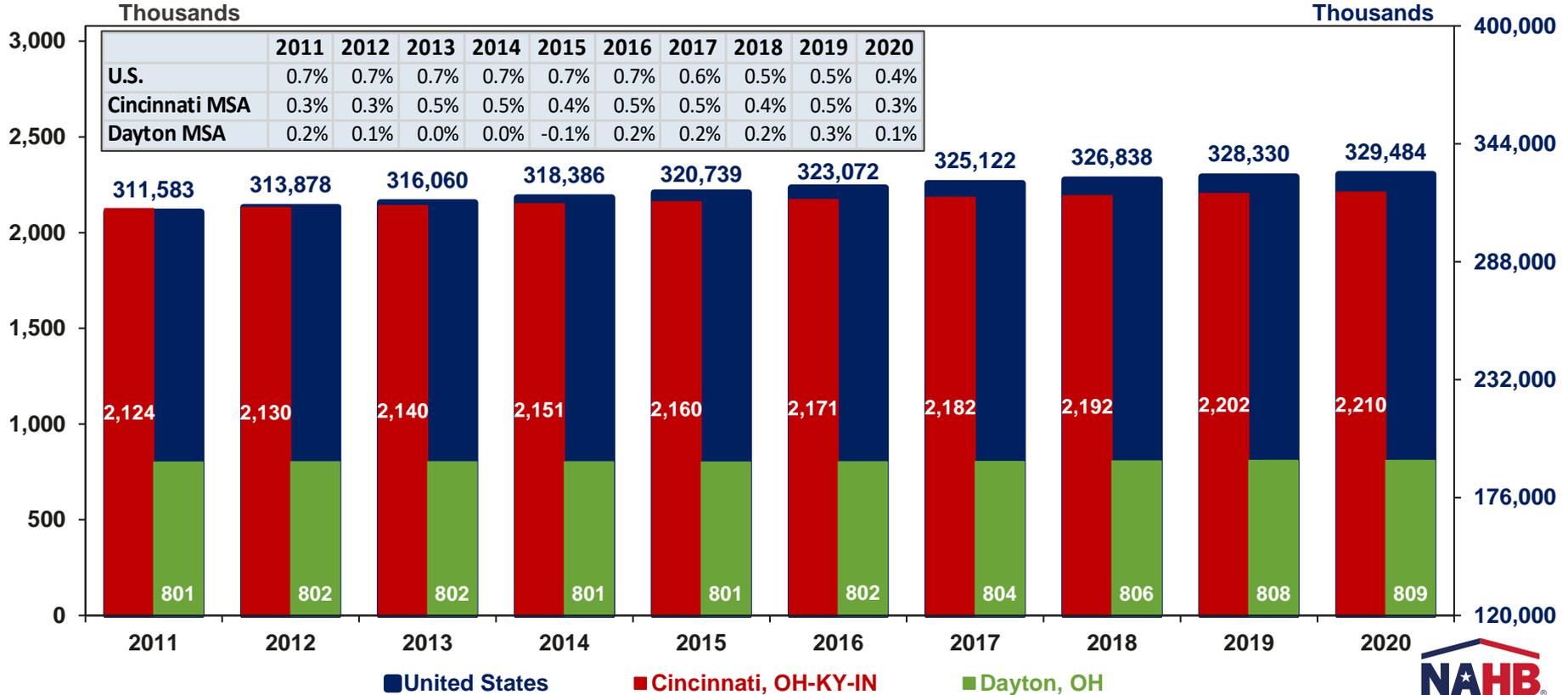
Federal Reserve is tightening monetary policy



Source: Federal Reserve and Freddie Mac data and NAHB forecast.

Population Growth

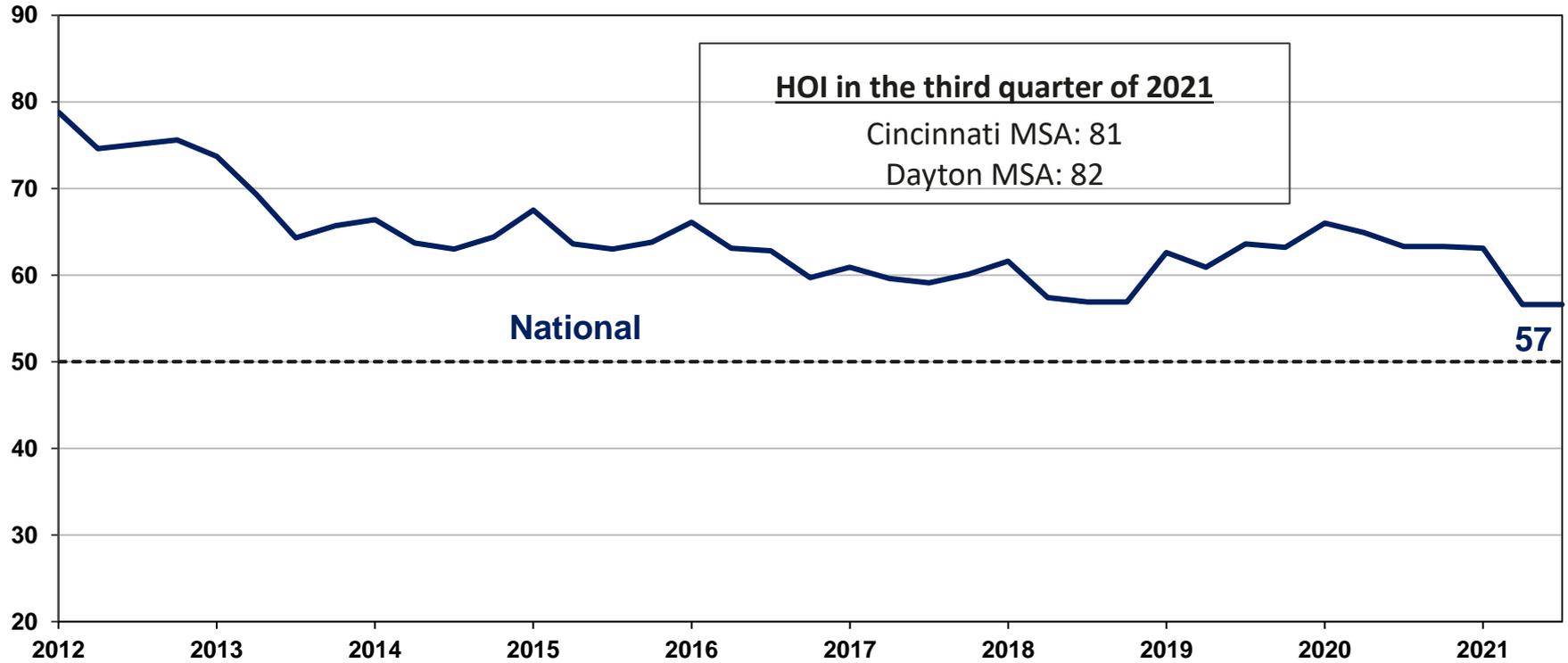
Cincinnati and Dayton MSAs population growth slower than national rates



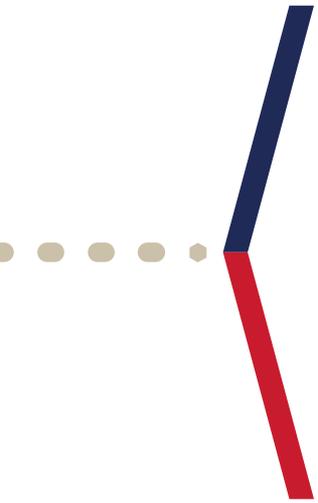
Source: U.S. Census Bureau (BOC).



Housing Affordability Declines? NAHB/Wells Fargo HOI Lower



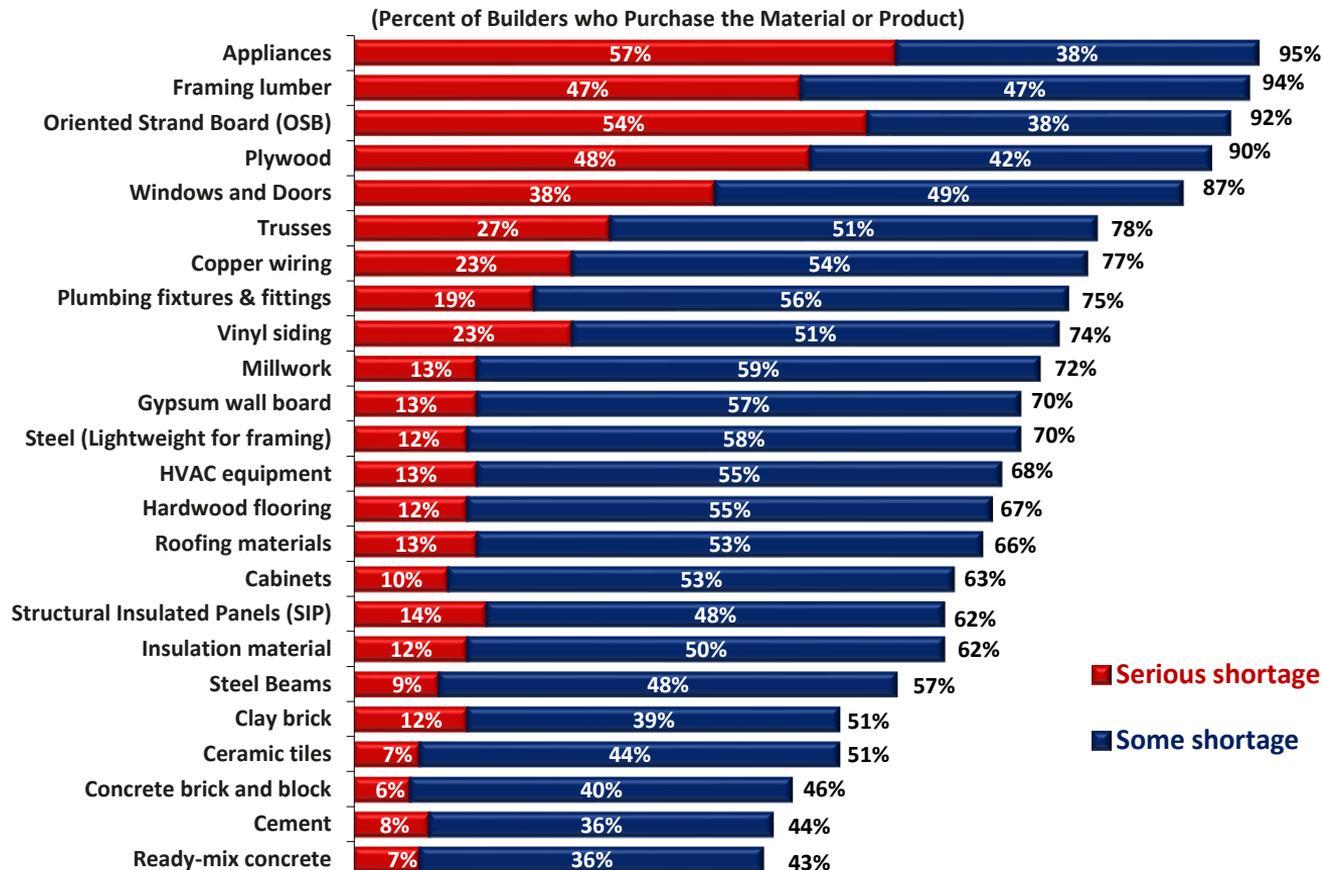
Source: NAHB/Wells Fargo Housing Opportunity Index (HOI).



Supply-Side Factors

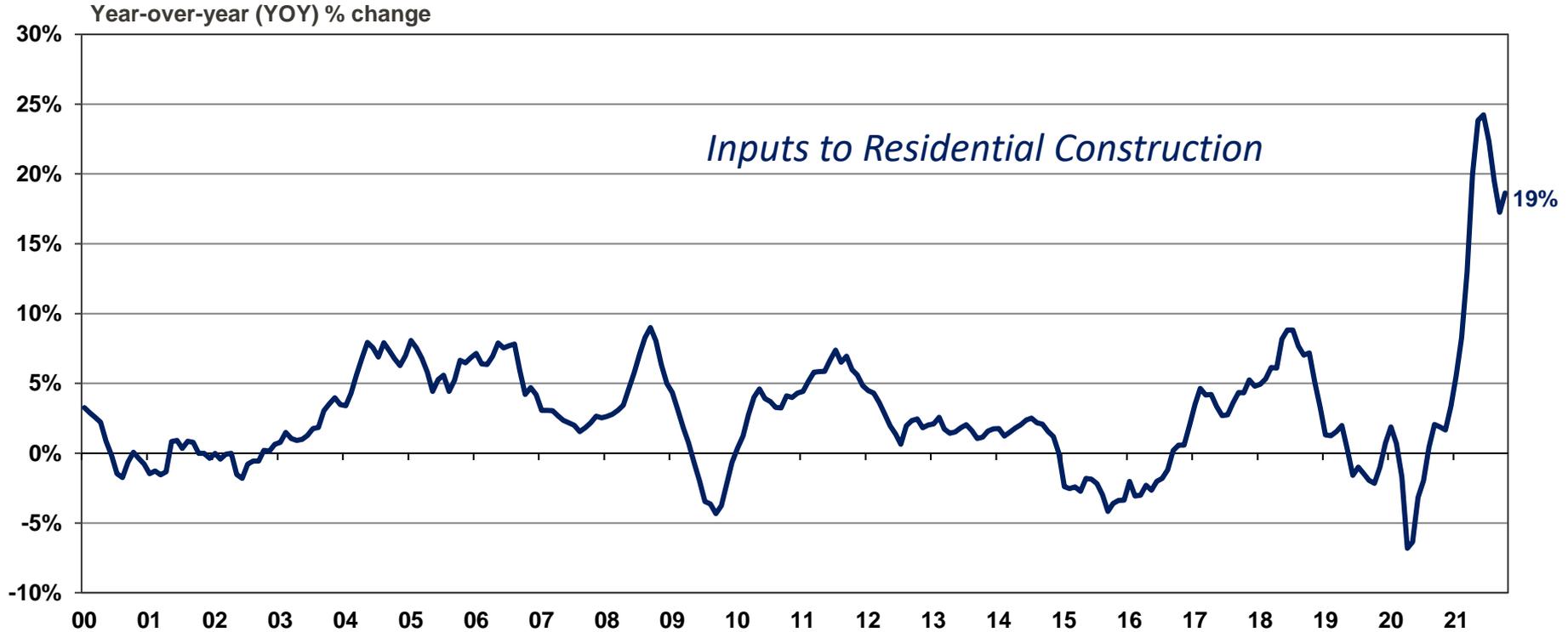


Builders Reporting Shortages in May 2021



Source: NAHB Survey.

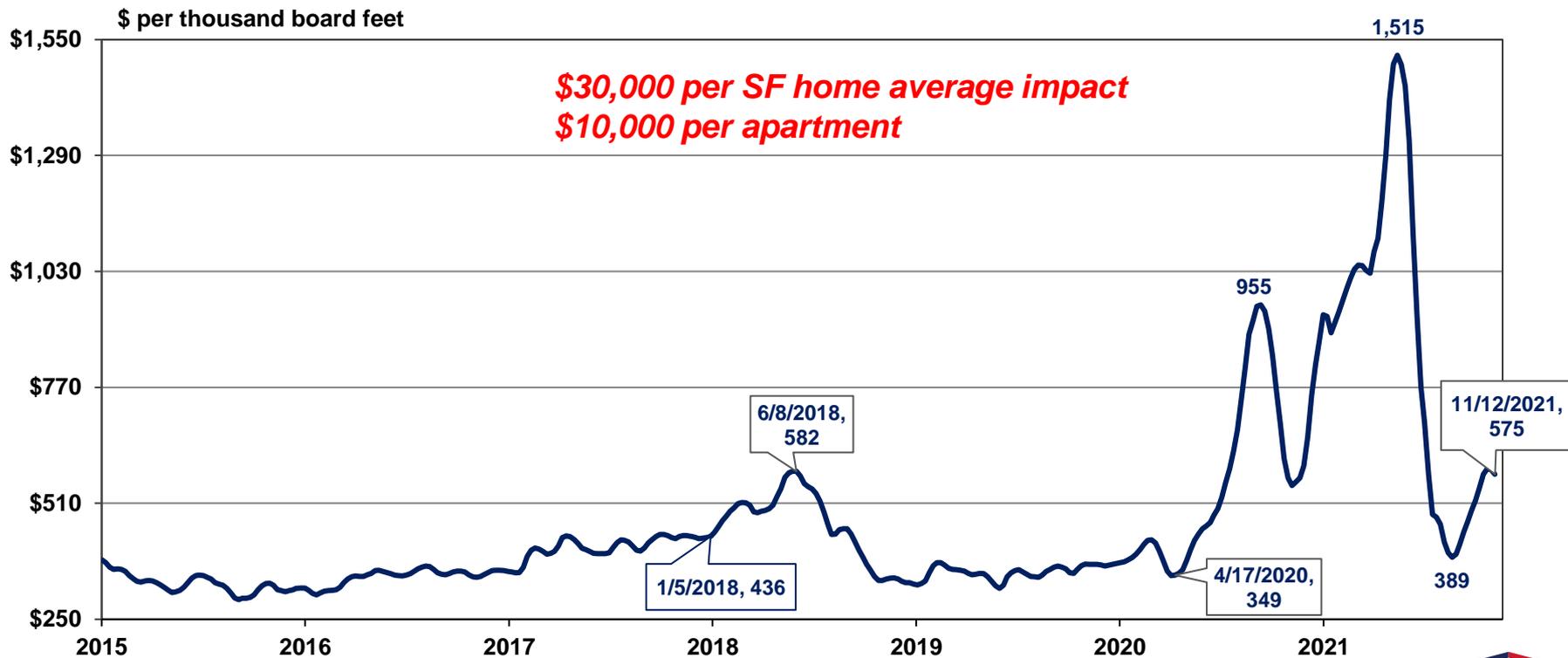
Building Materials - Residential Construction Cost



Source: U.S. Bureau of Labor Statistics (BLS): Producer Price Index (PPI)

Lumber Prices Edged Higher

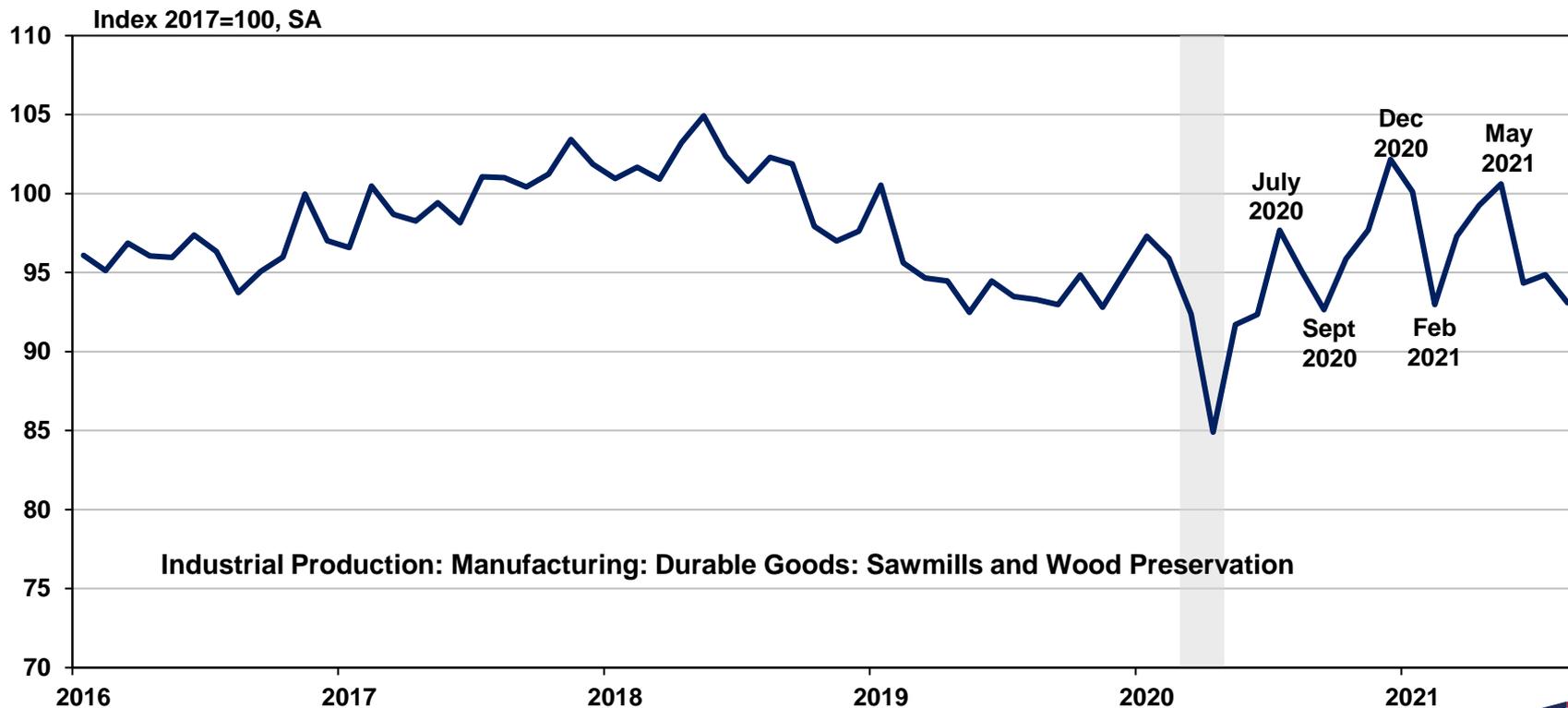
Current November price \$575; decreased 2% after two months of increases



Source: NAHB Analysis; Random Lengths Composite Index

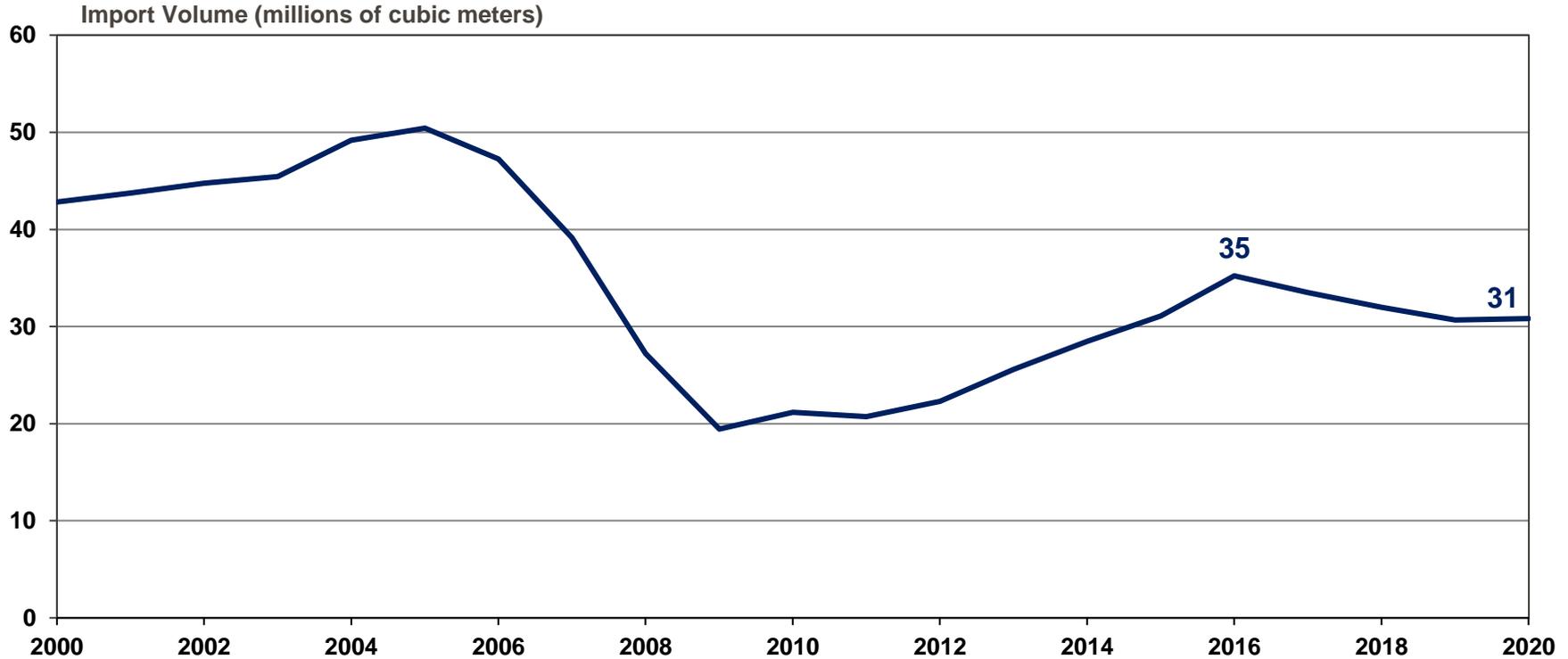
Domestic Sawmill Output

In September, sawmill employment is 3.7% higher than a year ago



Source: Board of Governors of the Federal Reserve System (US)

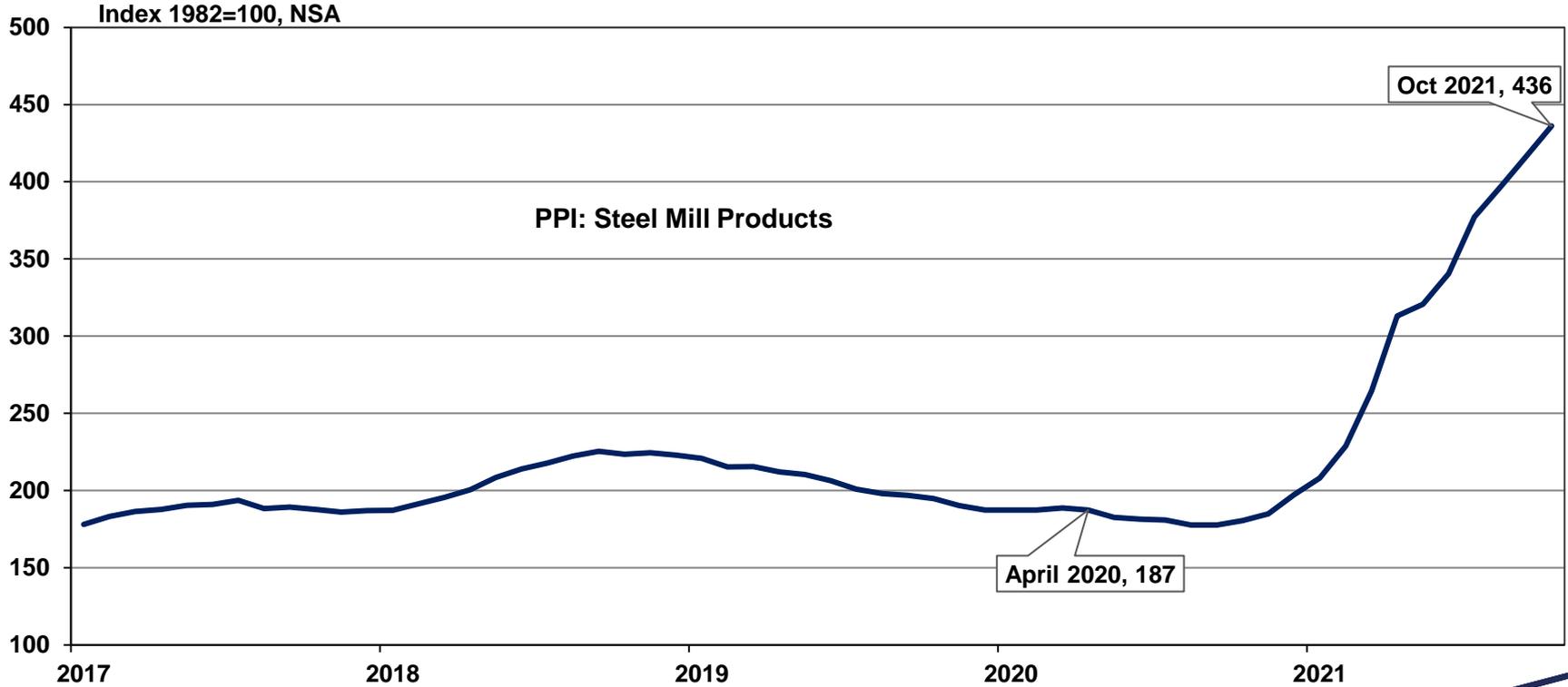
Softwood Lumber Imports from Canada



Source: DataWeb, U.S. International Trade Commission

Building Materials Prices – Steel and Others

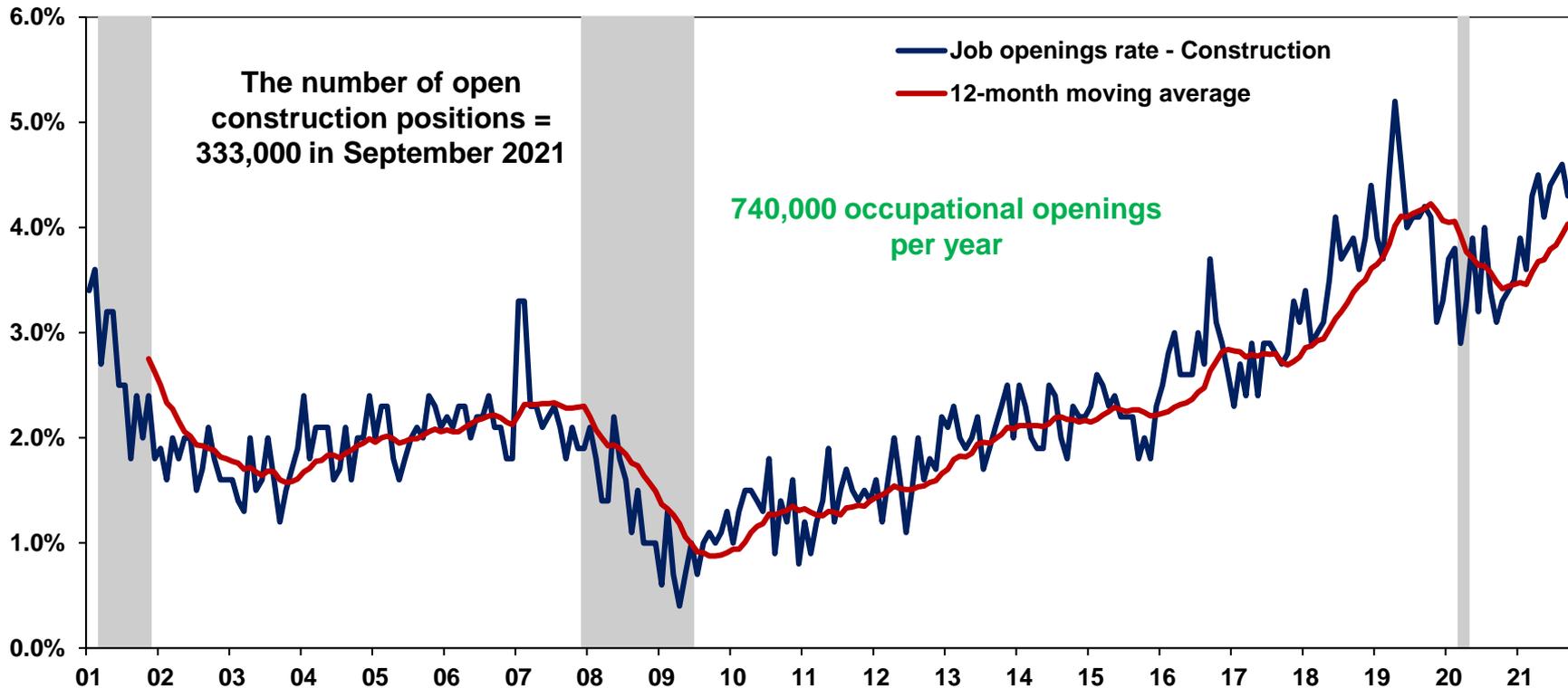
Steel prices increased 142% in a year; copper +35%, aluminum +32%, gypsum +26%



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

Labor - Construction

Skilled labor shortage persists; 113,200 net gain for residential construction since Jan 2020



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

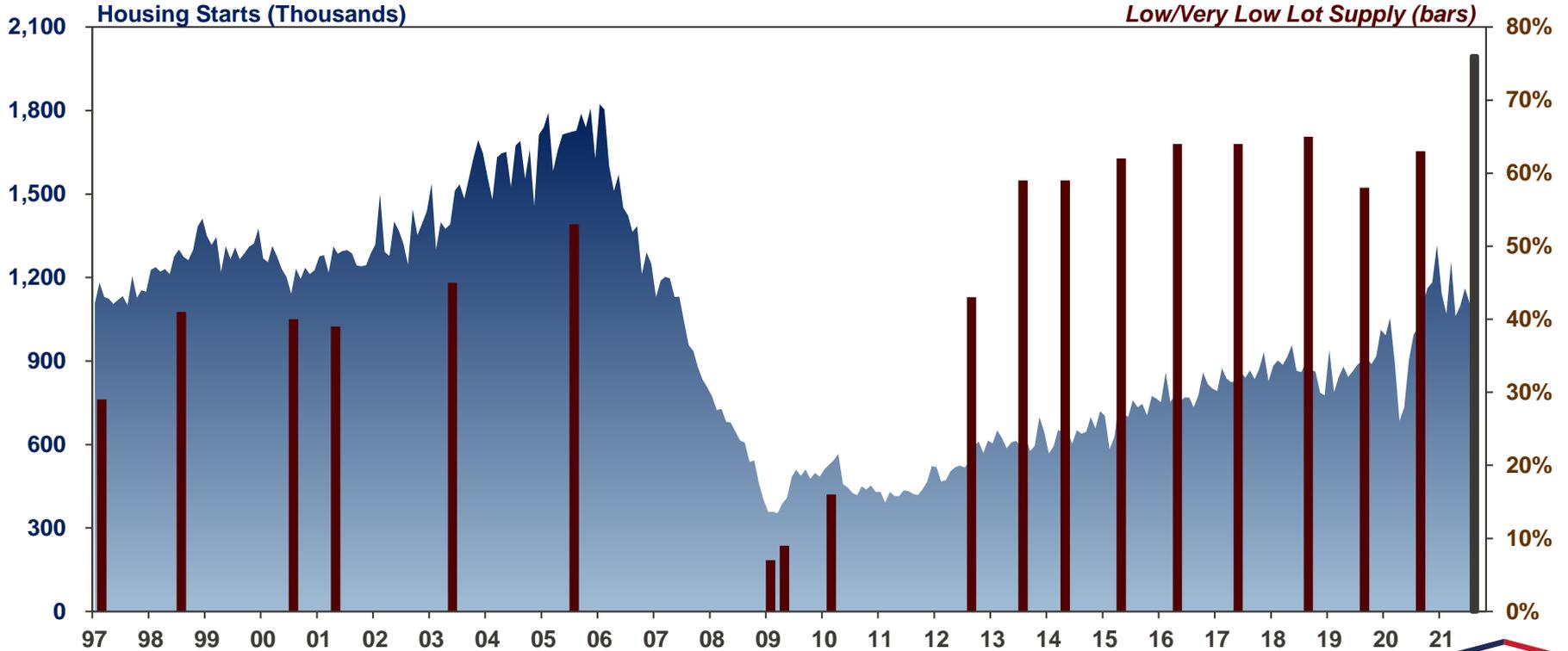
Average Hourly Wages for Residential Building Workers



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

/ Lot Shortages Reported by Single-family Builders

Shortage of lots worse than ever, hit a new record in 2021



Source: Census Bureau and NAHB/Wells Fargo HMI survey

Regulatory Costs \$93,870 Per New Home (11% Gain 2016 to 2021)

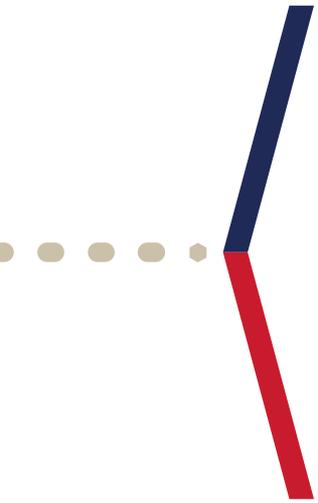
Total effect of building codes, land use, environmental and other rules

23.8% of price



Source: NAHB/Wells Fargo Housing Market Index (HMI)



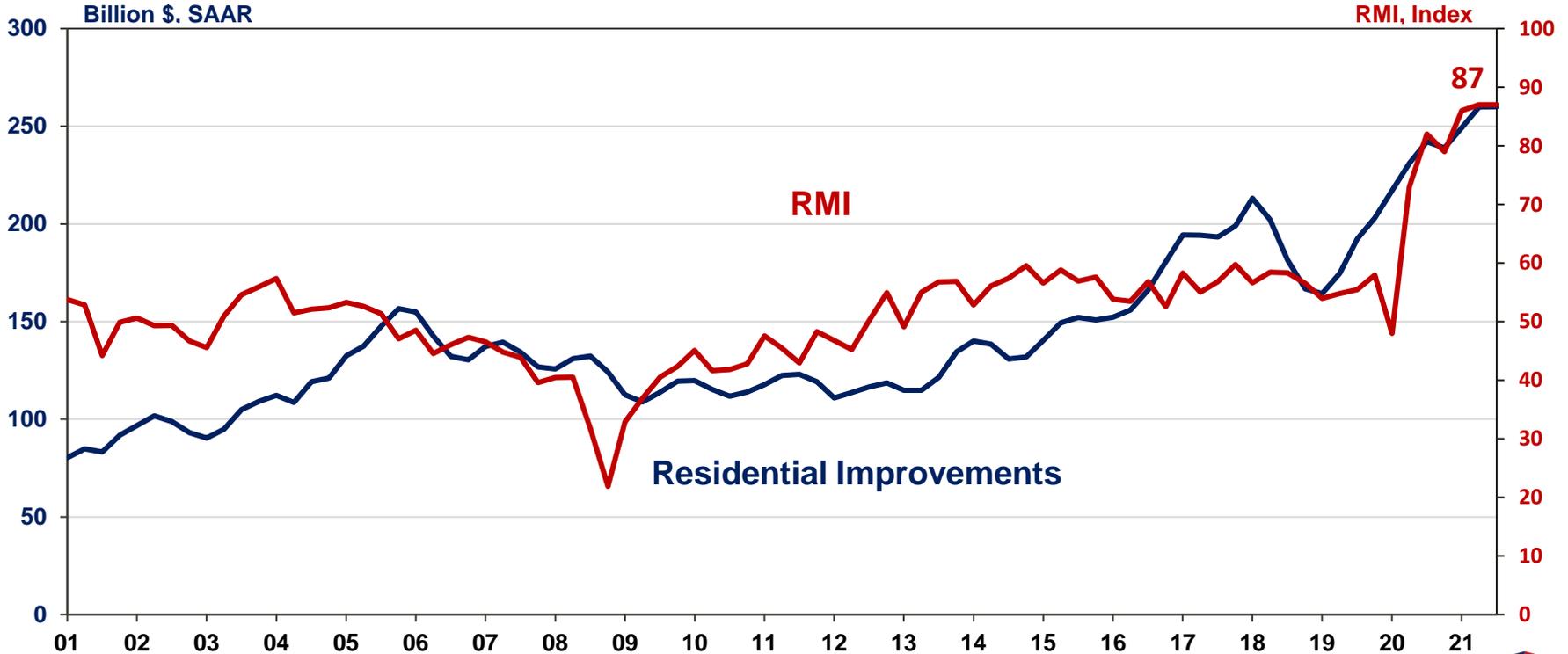


Construction Outlook



NAHB/Royal Building Products Remodeling Market Index

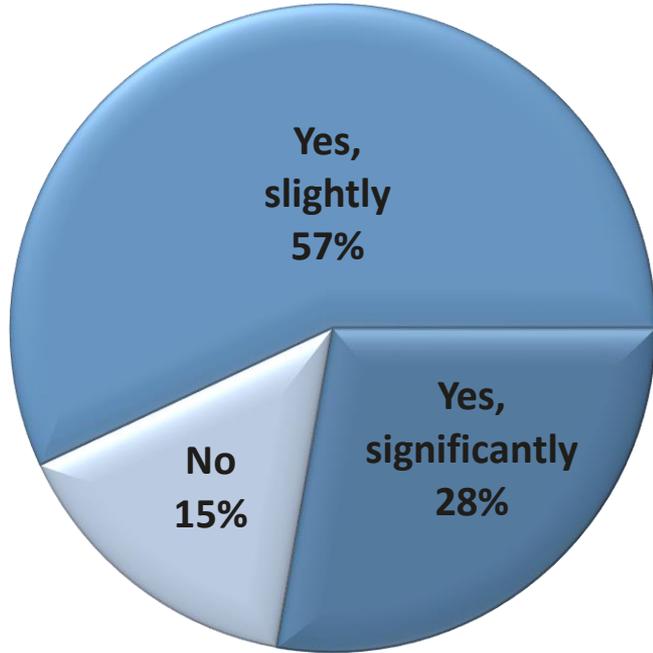
Positive residential remodeler's sentiment for projects of all sizes



Source: U.S. Census Bureau (BOC) and NAHB/Royal Building Products RMI

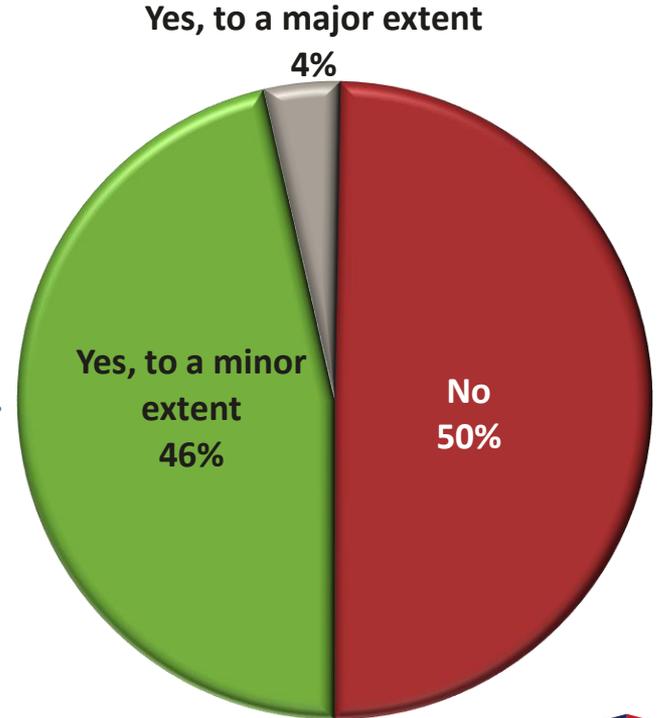
Remodeling: Higher Prices And Pricing Out Demand

Have you raised your prices in the past six months?



(Percent of Respondents)

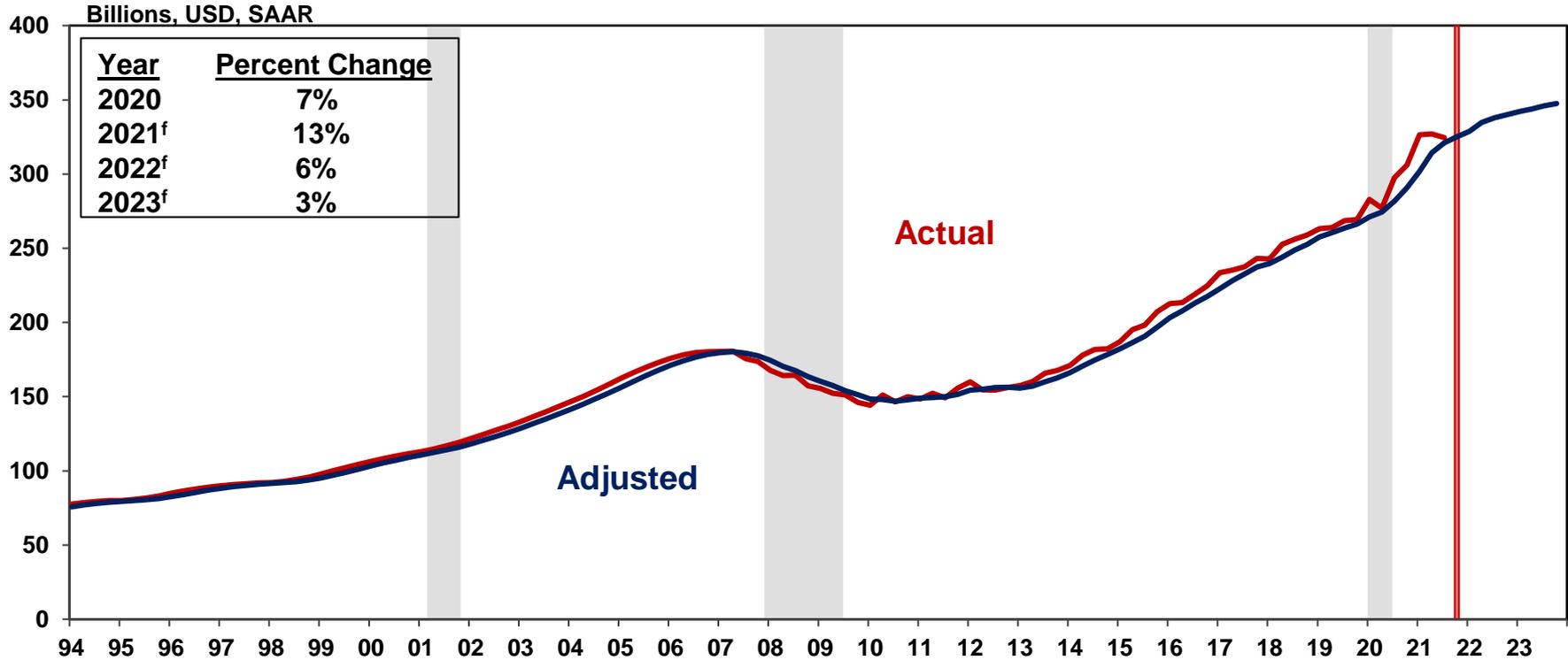
If you raised your prices (either slightly or significantly), has it priced out some demand?



Source: U.S. Census Bureau (BOC) and NAHB/Royal Building Products RMI

Residential Remodeling

Remodeling growth will continue as people use their homes for more purposes

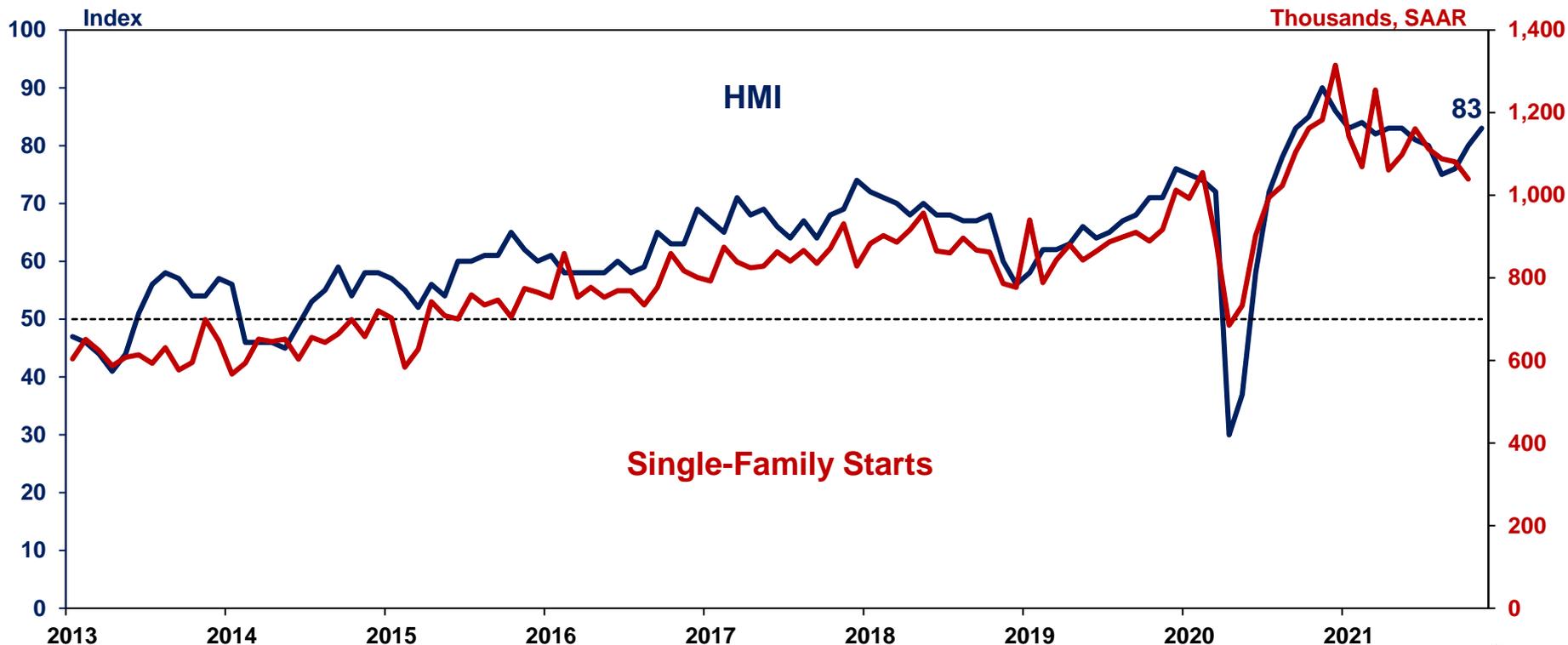


Source: U.S. Bureau of Economic Analysis (BEA): National Income and Product Accounts (NIPA) and NAHB forecast.

Note: In the analysis, 1-year moving average is used for adjusted data to smooth the trend.

NAHB/Wells Fargo Housing Market Index (HMI)

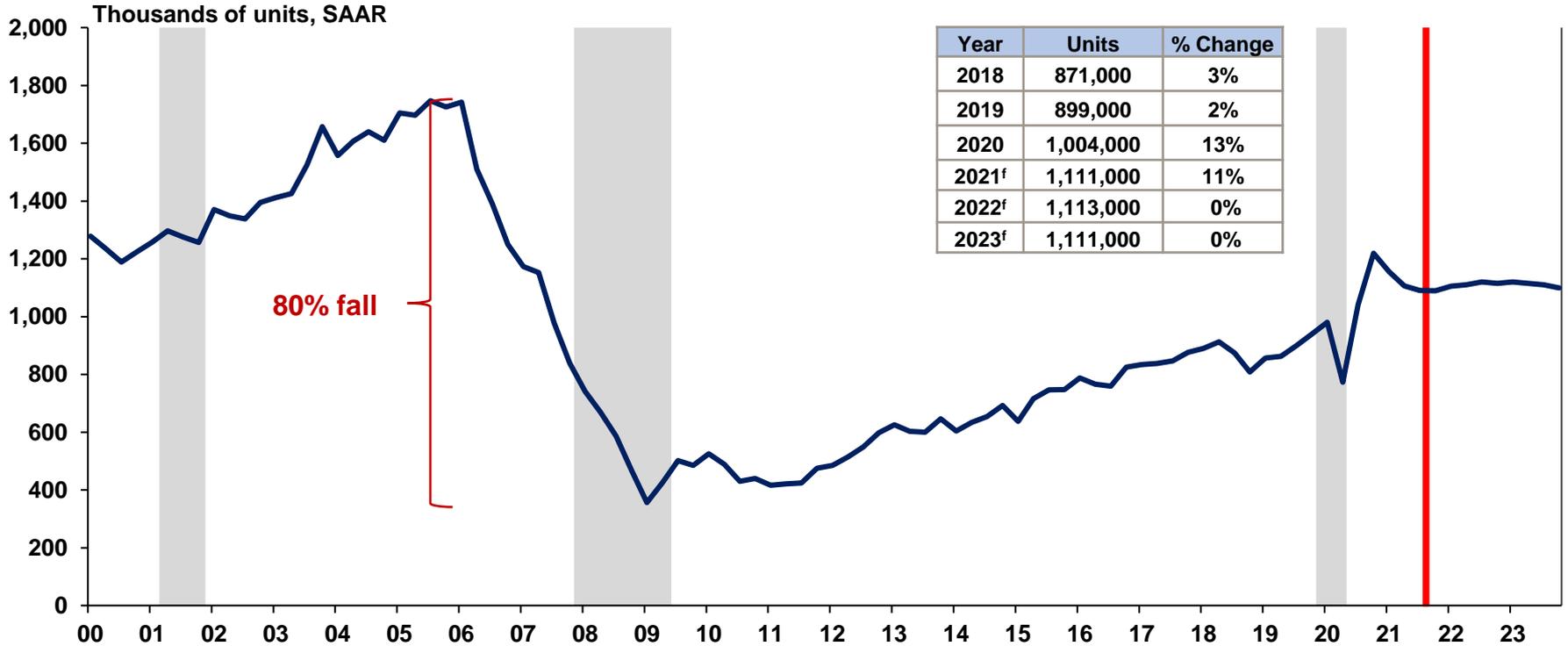
Strong demand boosts builder confidence in November despite supply-chain disruptions



Source: Census Bureau and NAHB/Wells Fargo HMI survey

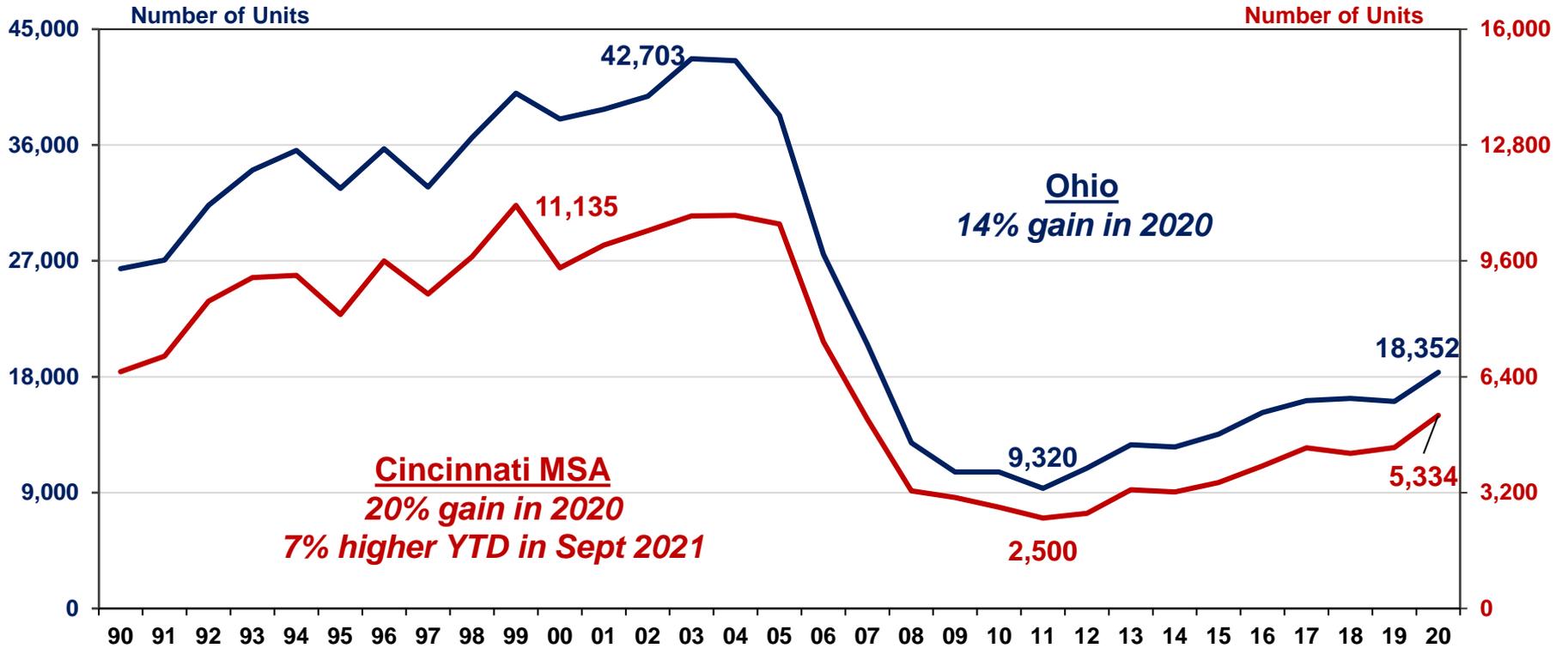
Single-Family Starts

Growth slows in 2022 and 2023, returning to long-run trend but 25% higher than 2019



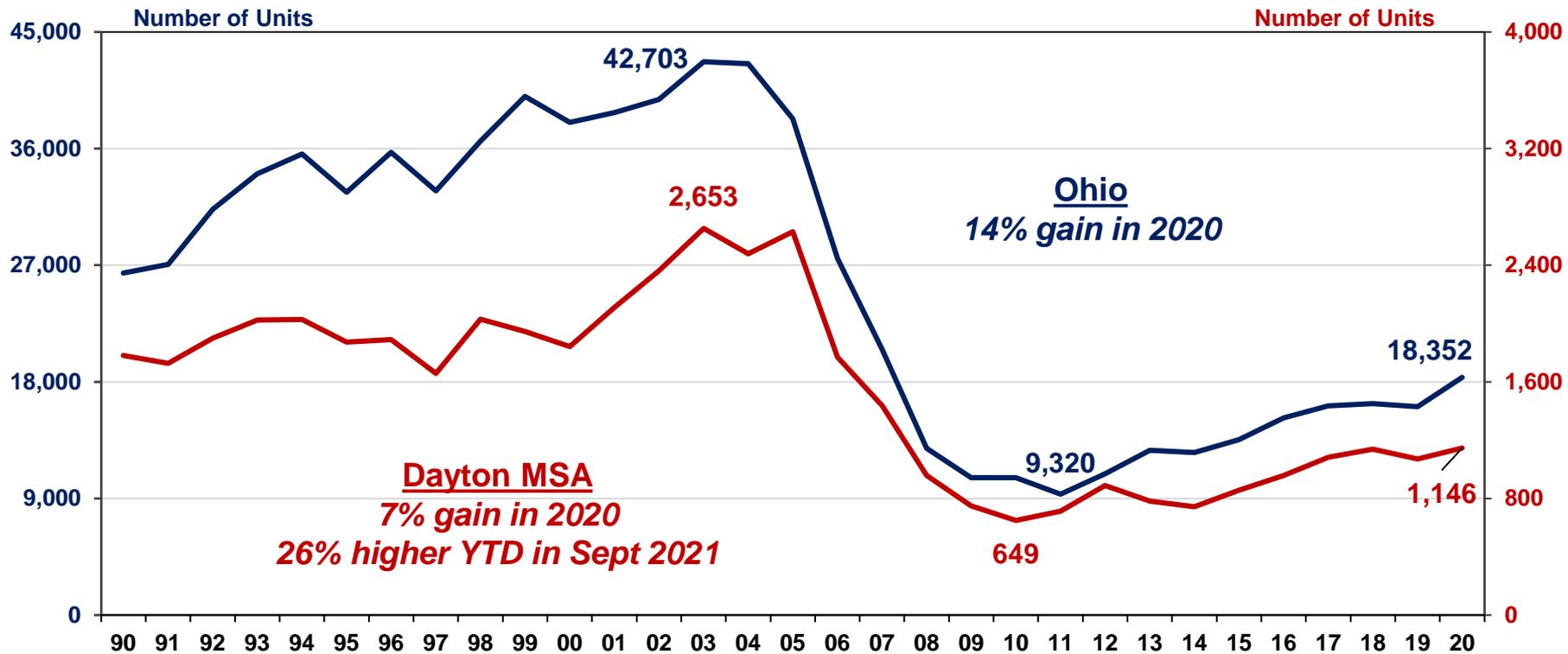
Source: U.S. Census Bureau (BOC) and NAHB forecast

Single-Family Building Permits – Ohio and Cincinnati MSA



Source: Census Bureau.

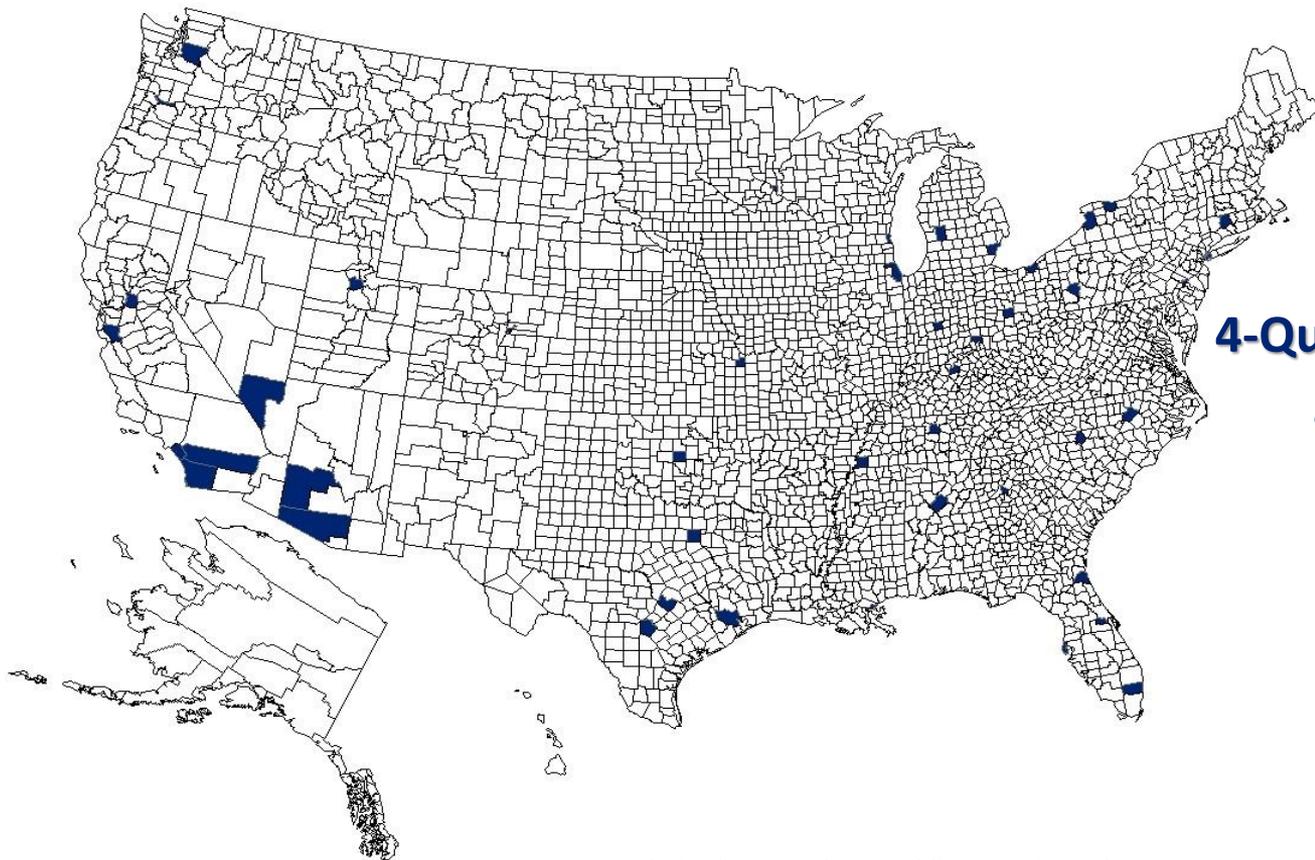
Single-Family Building Permits – Ohio and Dayton MSA



Source: Census Bureau.

NAHB Home Building Geography Index

17.0% of single-family construction takes place in Large Metro – Core County

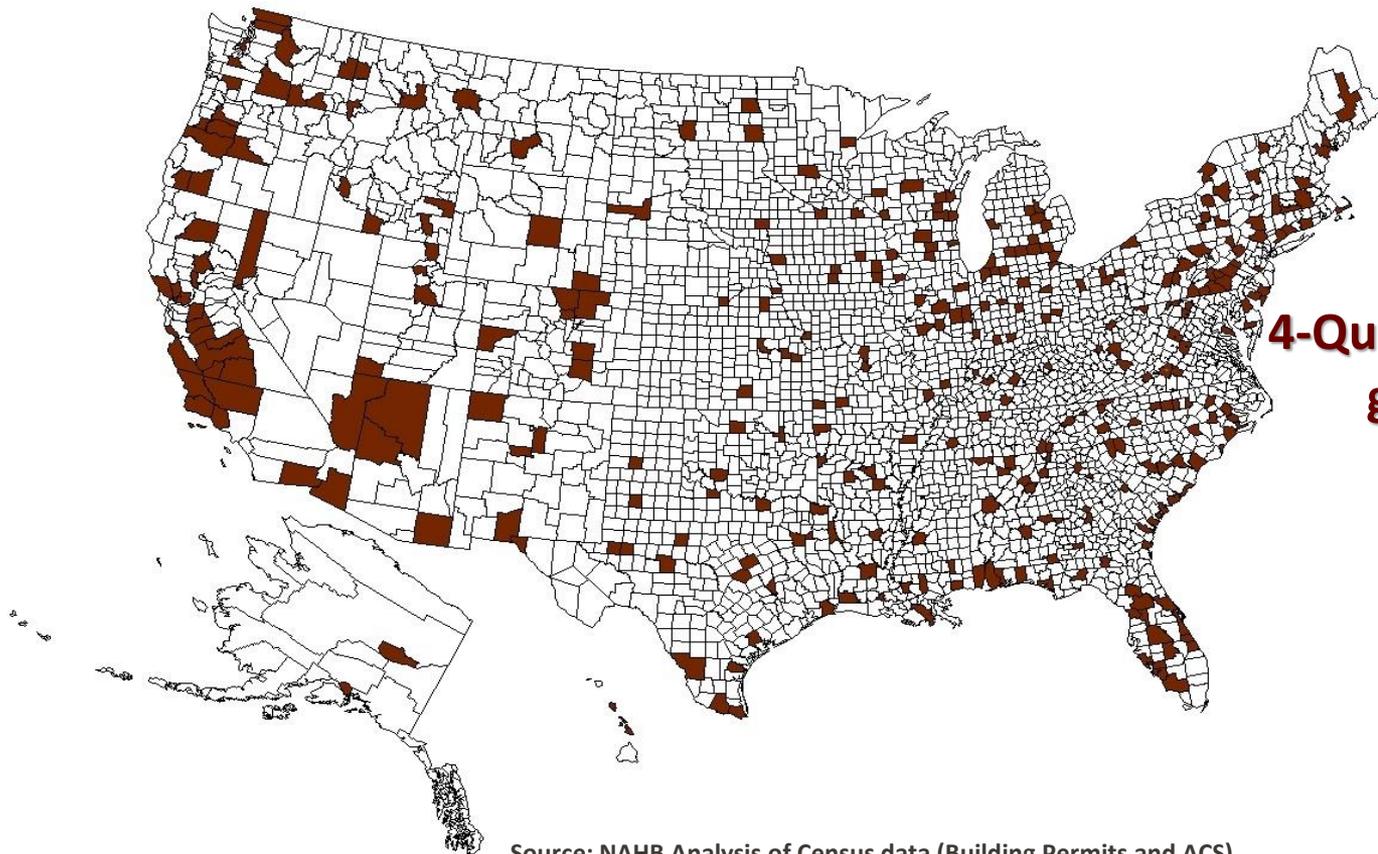


Q2 2021
4-Quarter MA of YoY
growth rate:
26.2%

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

NAHB Home Building Geography Index

28.9% of single-family construction takes place in **Smaller Metro – Core County**

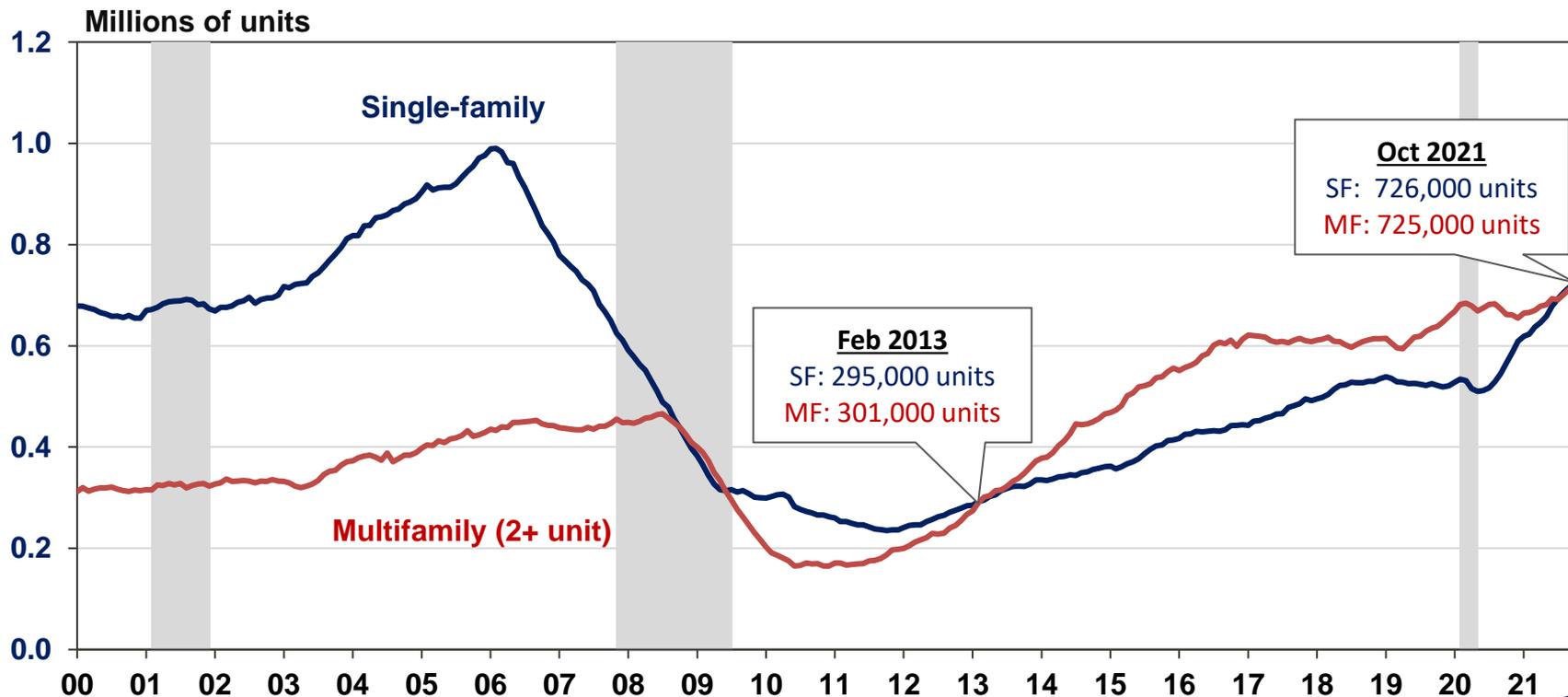


Q2 2021
4-Quarter MA of YoY
growth rate:
28.0%

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

Housing Units under Construction

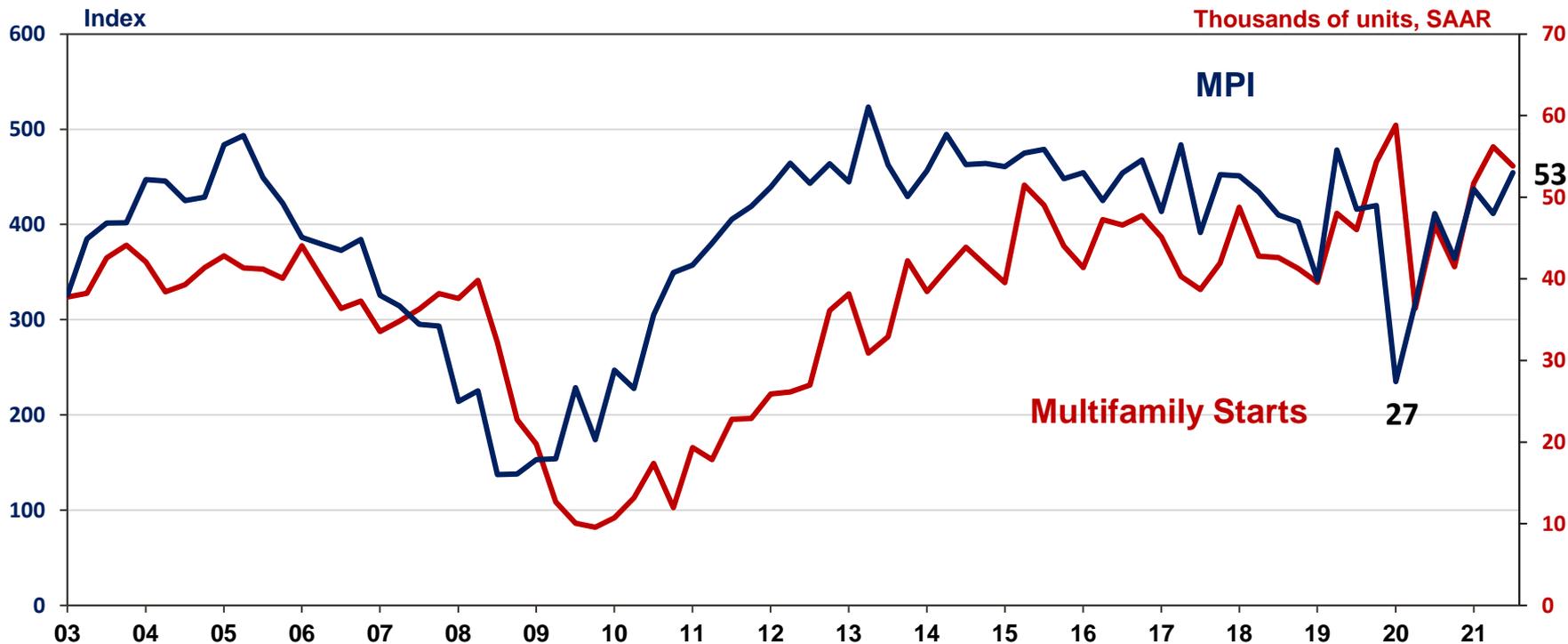
Equal number of single-family and multifamily units for first time since 2013



Source: U.S. Census Bureau (BOC)

NAHB Multifamily Production Index

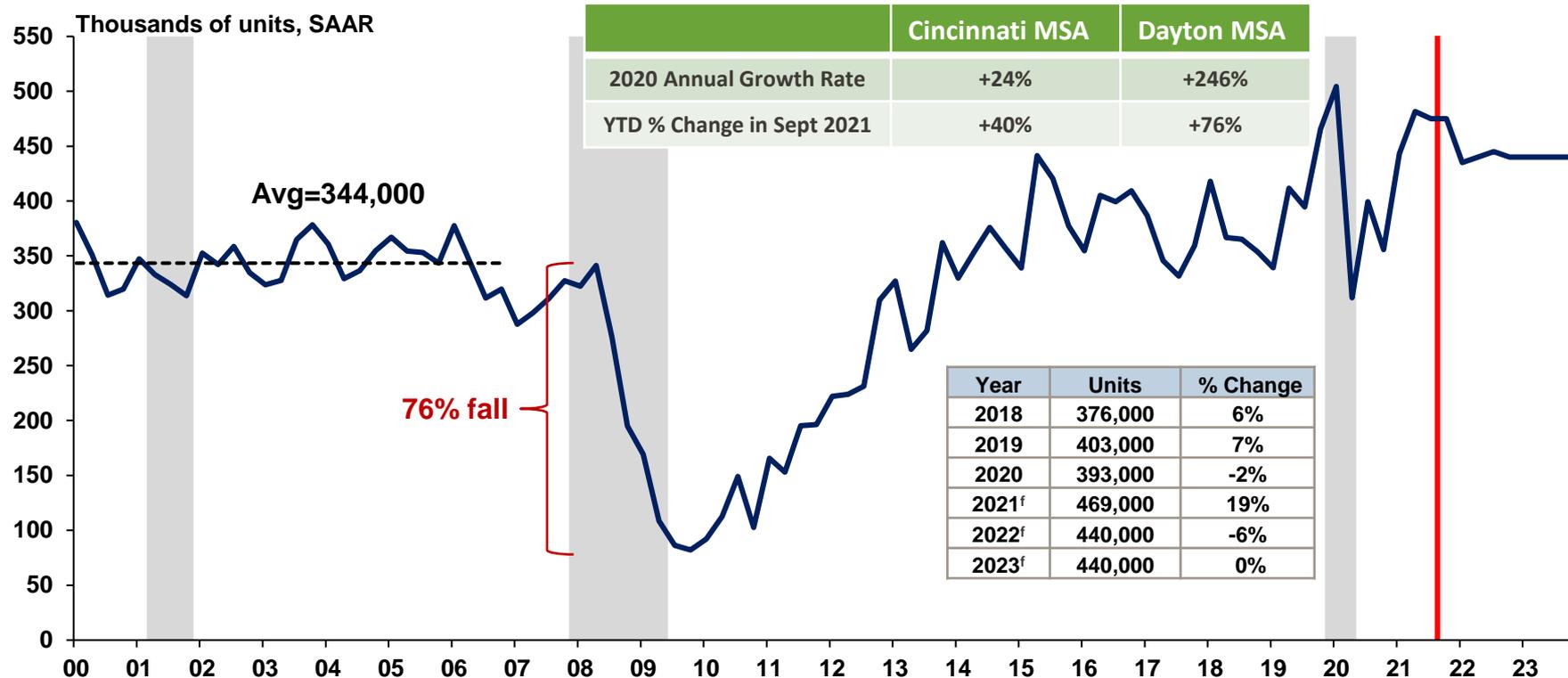
Sentiment on multifamily production and occupancy improved in the third quarter



Source: U.S. Census Bureau (BOC) and NAHB Multifamily Market Survey (MMS).

Multifamily Construction Stabilizing After Strong Rebound

Multifamily growth for low-rise and low-density development



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

Thank you

Questions?

rdietz@nahb.org

@dietz_econ



Economic Leadership Sponsor



Home Mortgage

eyeonhousing.org
housingeconomics.com