

APOLLO

## US Housing Outlook:

Housing recovery continues, driven by low supply. But housing demand is gradually slowing because of high mortgage rates, high home prices, and rising unemployment.

**Torsten Slok, Rajvi Shah, and Shruti Galwankar**  
**tslok@apollo.com**

**Apollo Global Management**

July 2024

Unless otherwise noted, information as of July 2024

Confidential and Proprietary – Not for distribution, in whole or in part, without the express written consent of Apollo Global Management, Inc.

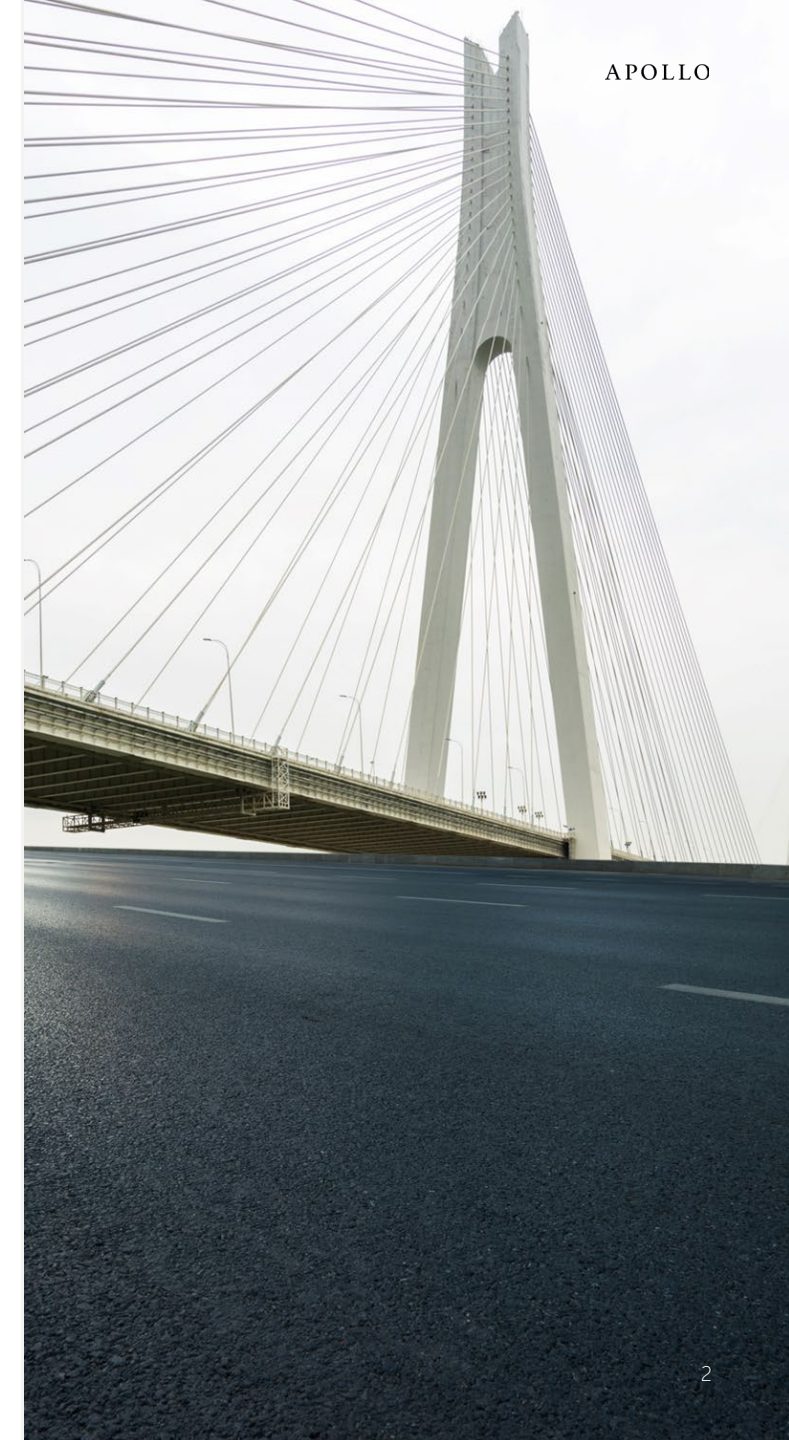
It should not be assumed that investments made in the future will be profitable or will equal the performance of the investments shown in this document.

# Legal Disclaimer

Unless otherwise noted, information included herein is presented as of the dates indicated. Apollo Global Management, Inc. (together with its subsidiaries, "Apollo") makes no representation or warranty, expressed or implied, with respect to the accuracy, reasonableness, or completeness of any of the information contained herein, including, but not limited to, information obtained from third parties. Opinions, estimates and projections constitute the current judgment of the author as of the date indicated. They do not necessarily reflect the views and opinions of Apollo and are subject to change at any time without notice. Apollo does not have any responsibility to update the information to account for such changes. Hyperlinks to third-party websites in these materials are provided for reader convenience only. There can be no assurance that any trends discussed herein will continue.

The information contained herein is not intended to provide, and should not be relied upon for, accounting, legal or tax advice and does not constitute an investment recommendation or investment advice. Investors should make an independent investigation of the information contained herein, including consulting their tax, legal, accounting or other advisors about such information. Apollo does not act for you and is not responsible for providing you with the protections afforded to its clients.

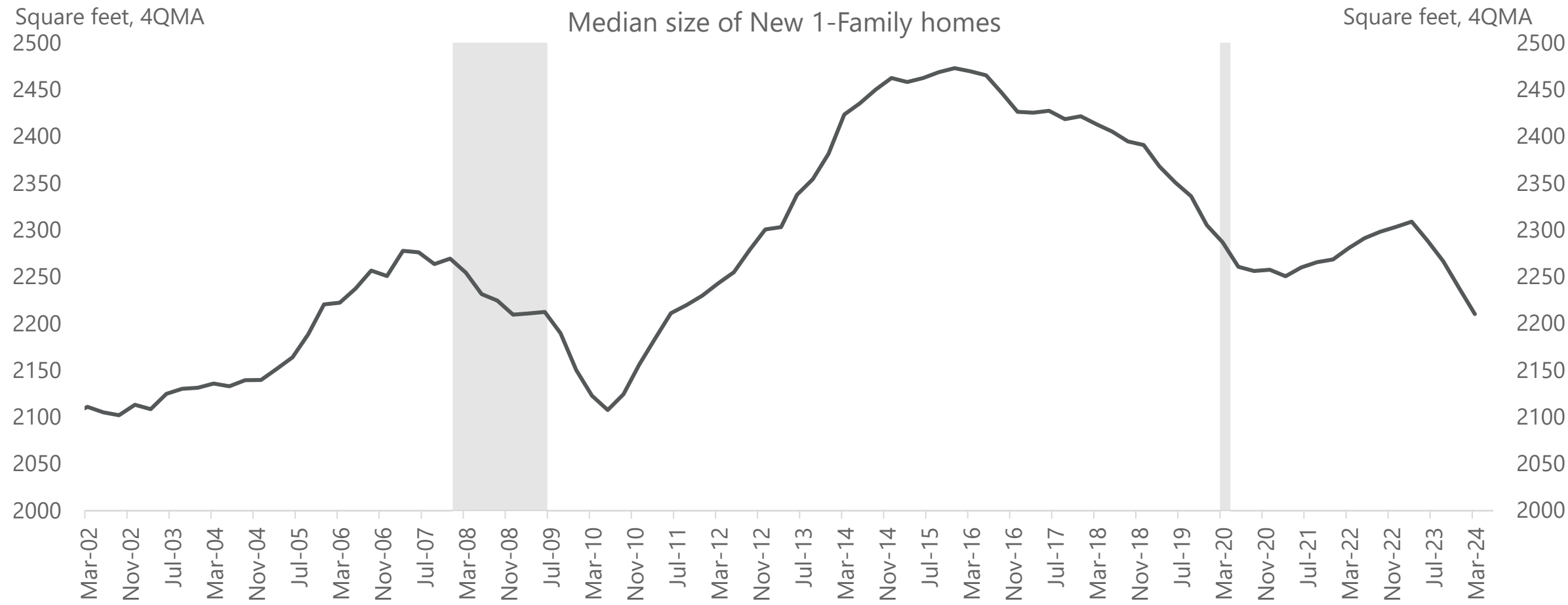
Certain information contained herein may be "forward-looking" in nature. Due to various risks and uncertainties, actual events or results may differ materially from those reflected or contemplated in such forward-looking information. As such, undue reliance should not be placed on such information. Forward-looking statements may be identified by the use of terminology including, but not limited to, "may", "will", "should", "expect", "anticipate", "target", "project", "estimate", "intend", "continue" or "believe" or the negatives thereof or other variations thereon or comparable terminology.



## **Housing recovery continues, driven by:**

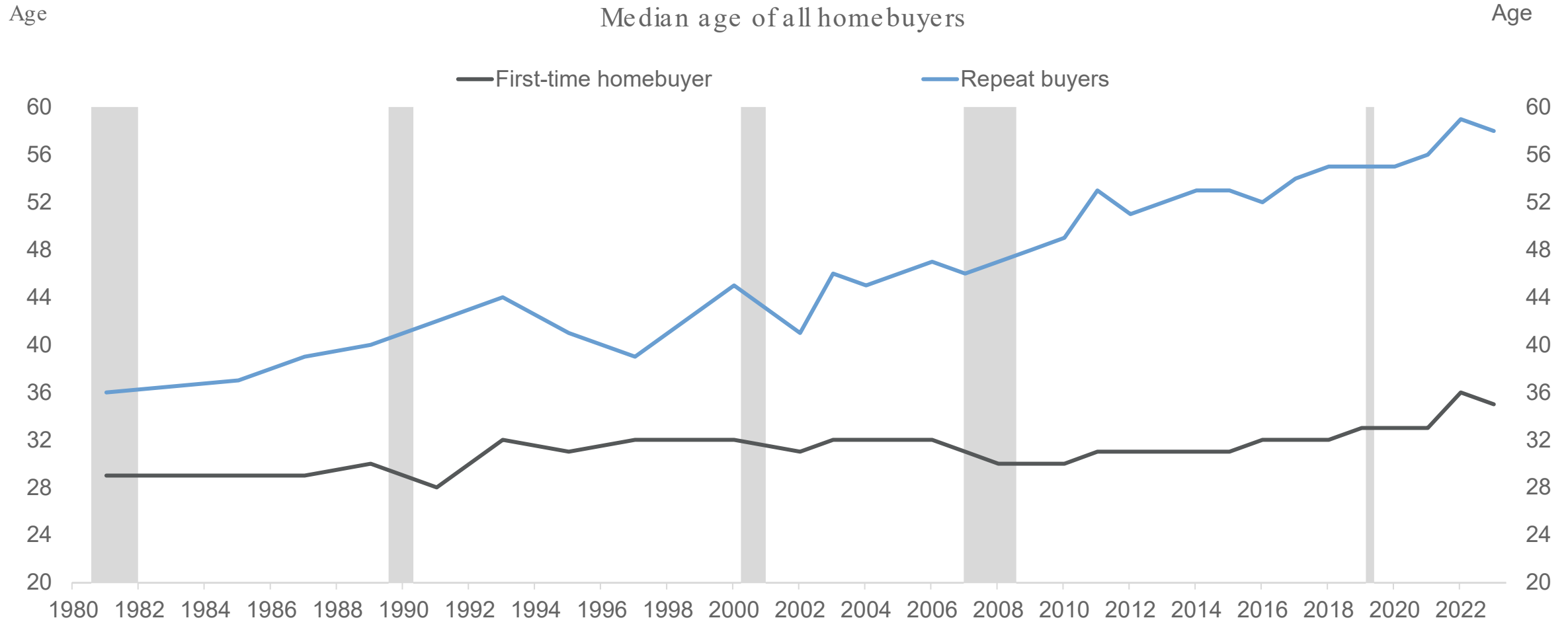
1. Low housing supply
2. Housing demand dampened by high home prices and high mortgage rates
3. Solid job growth but rising unemployment rate
4. Robust wage growth
5. Household wealth levels and fixed income cash flows high, supporting housing demand

# US homes are getting smaller

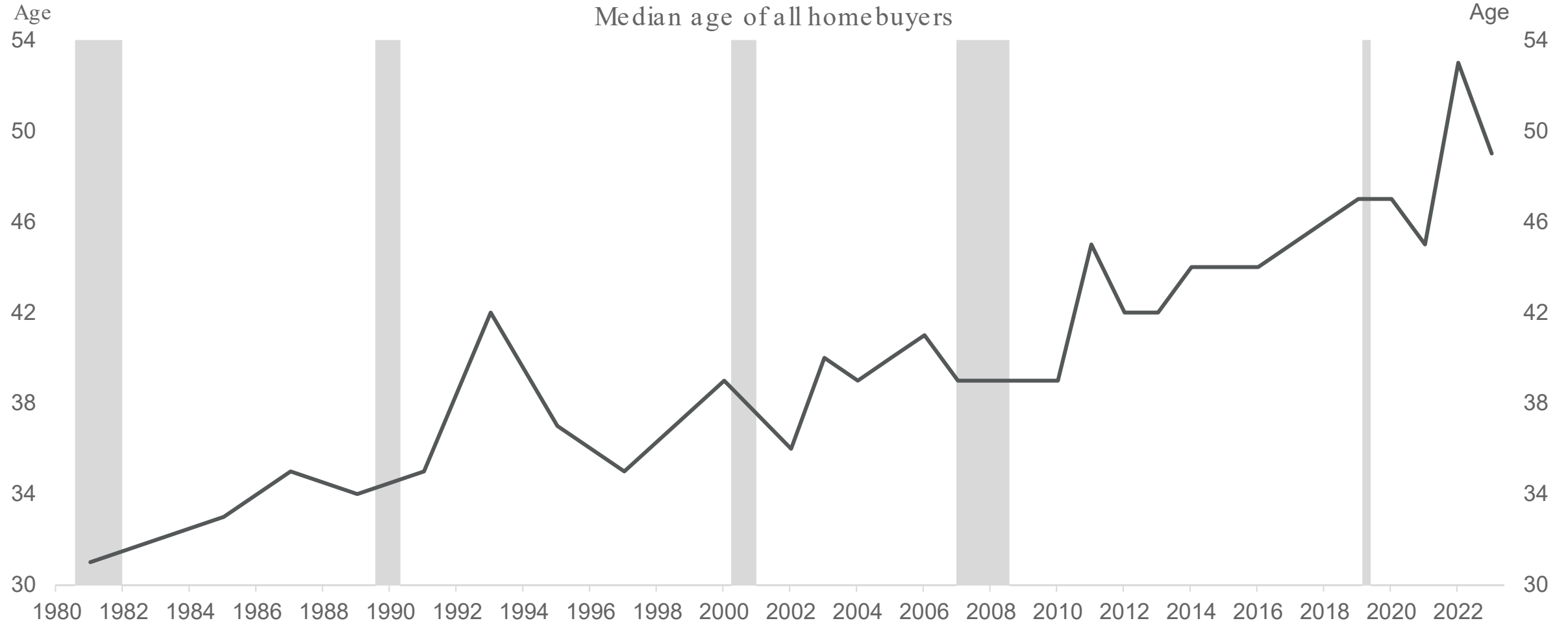


Source: Census Bureau, Haver Analytics, Apollo Chief Economist

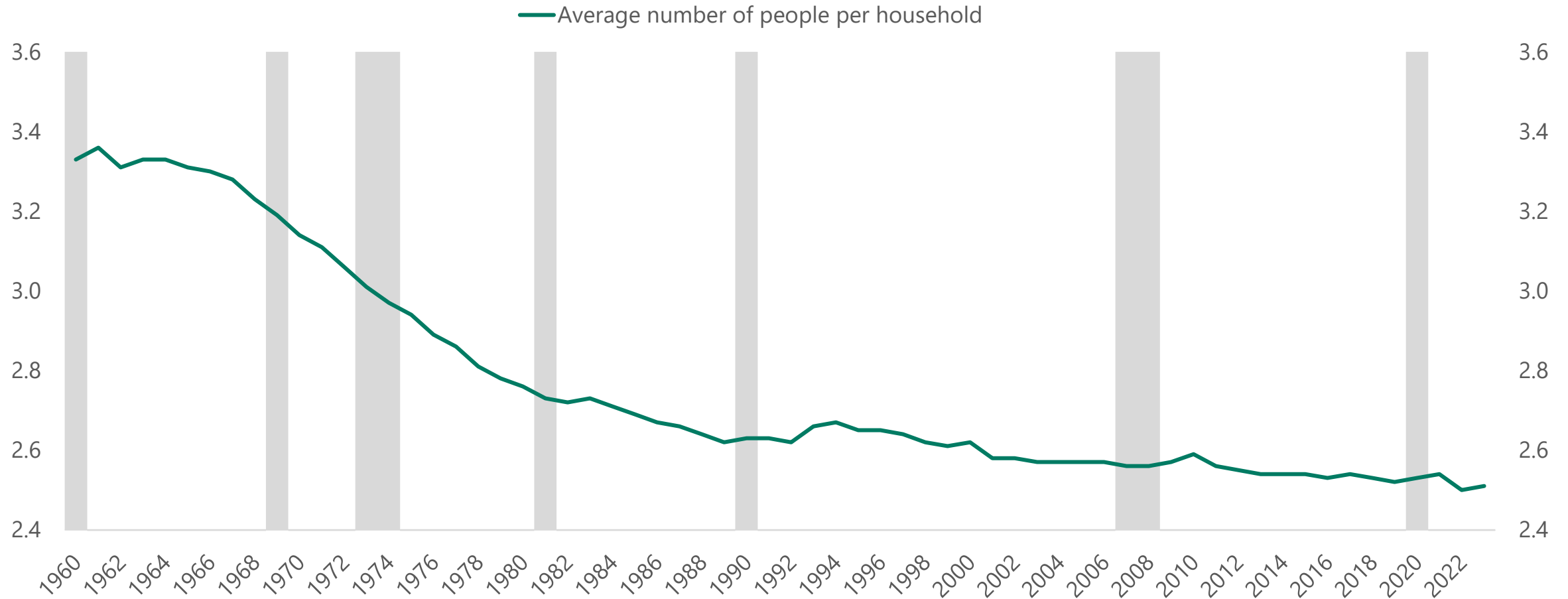
# Homebuyers are getting older



The median age of all homebuyers is now 49 years old, up from 31 in 1981



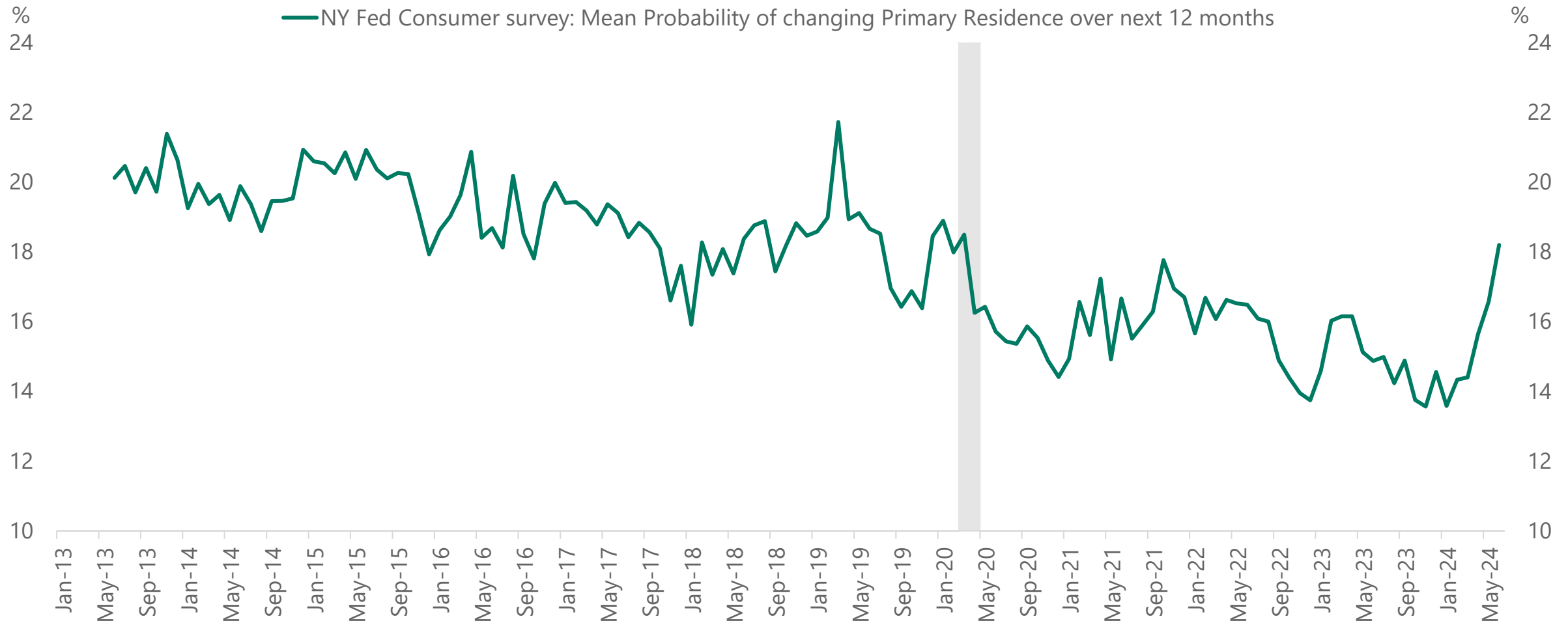
The average family size in the US has declined from 3.3 in 1960 to 2.5 by 2023.



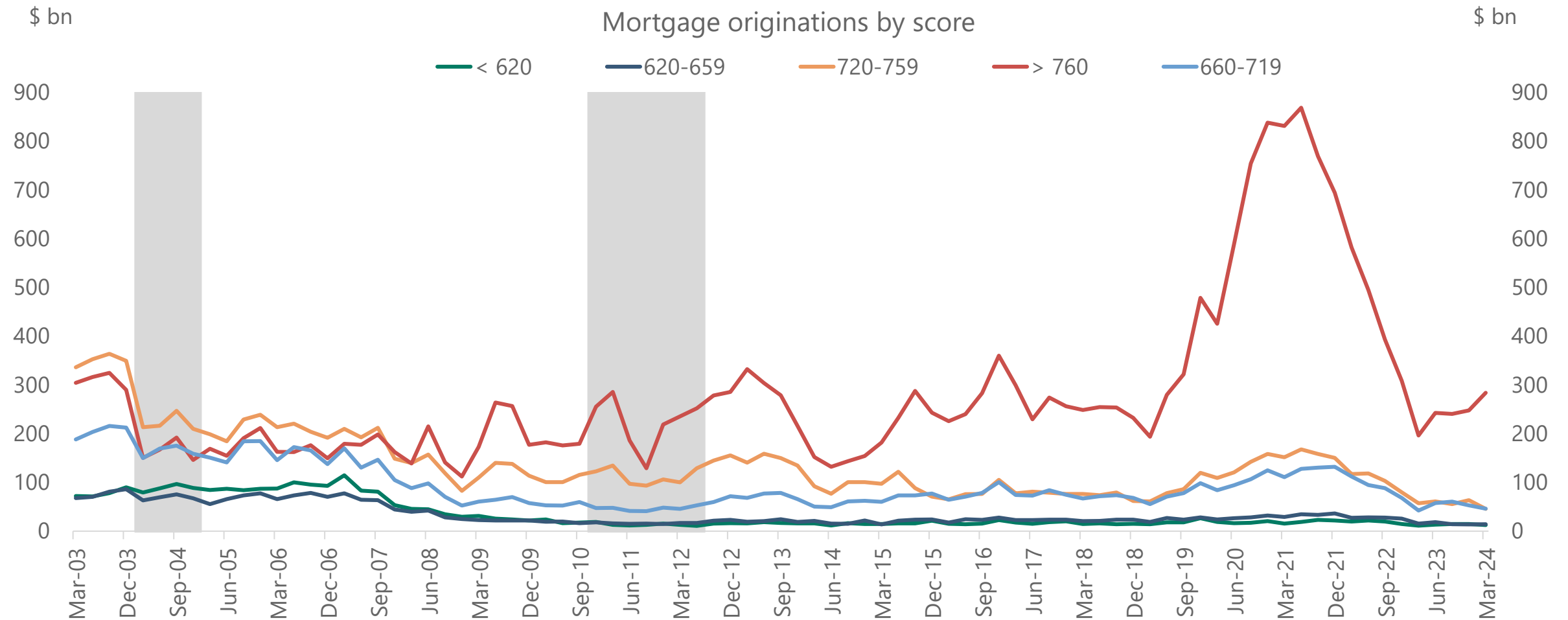
# Leading indicators for the housing market



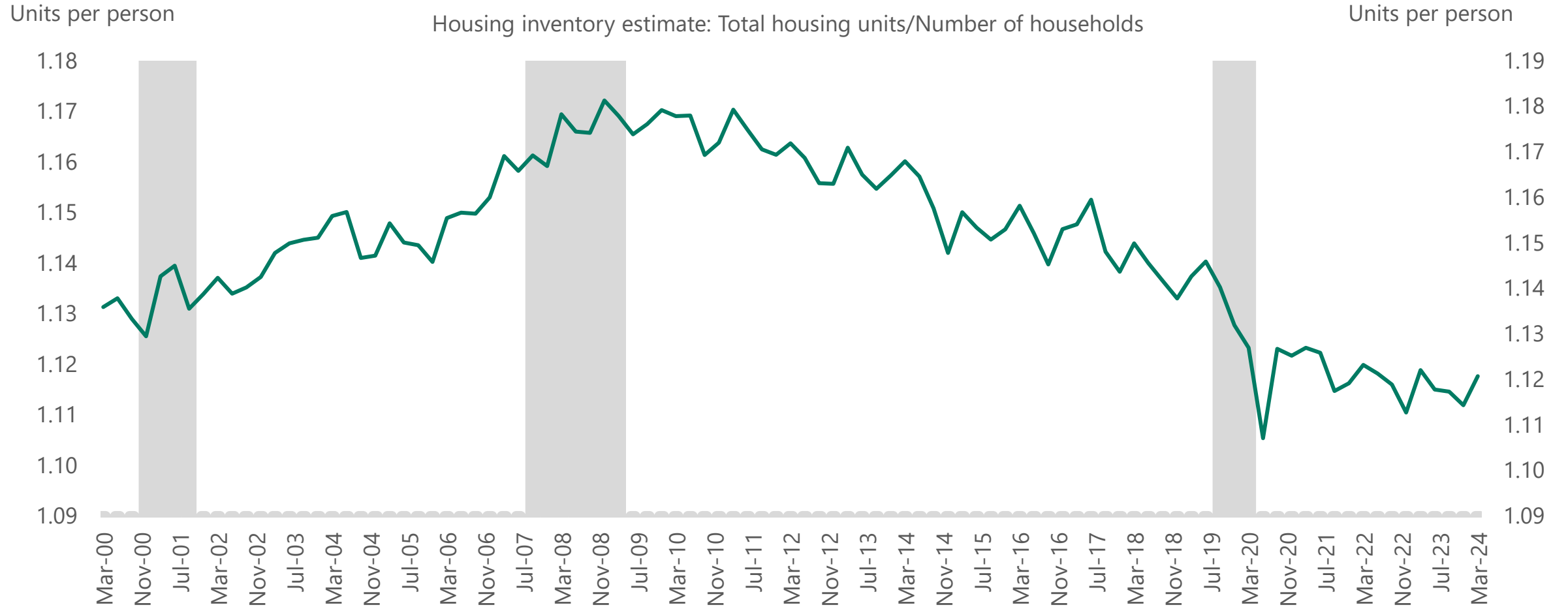
# Share of households planning to move over the next 12 months has increased recently



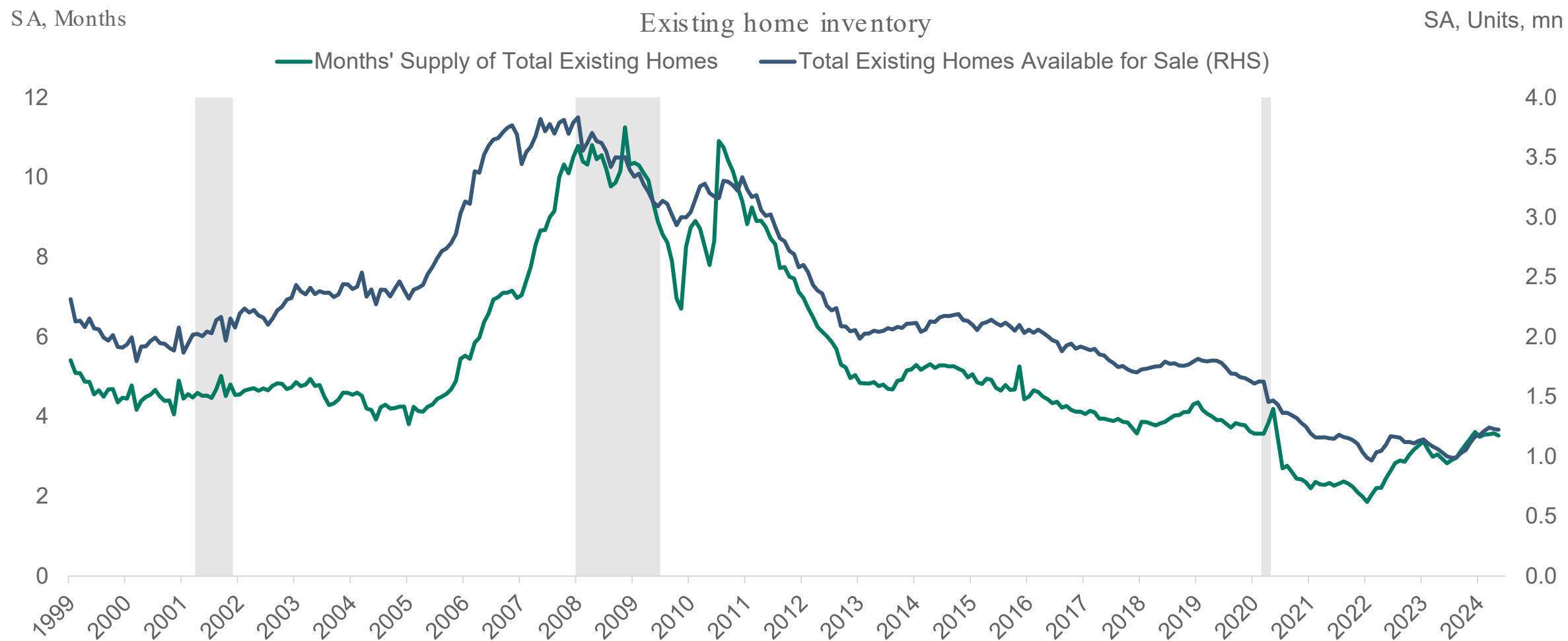
# Mortgage originations starting to move higher for households with high credit scores



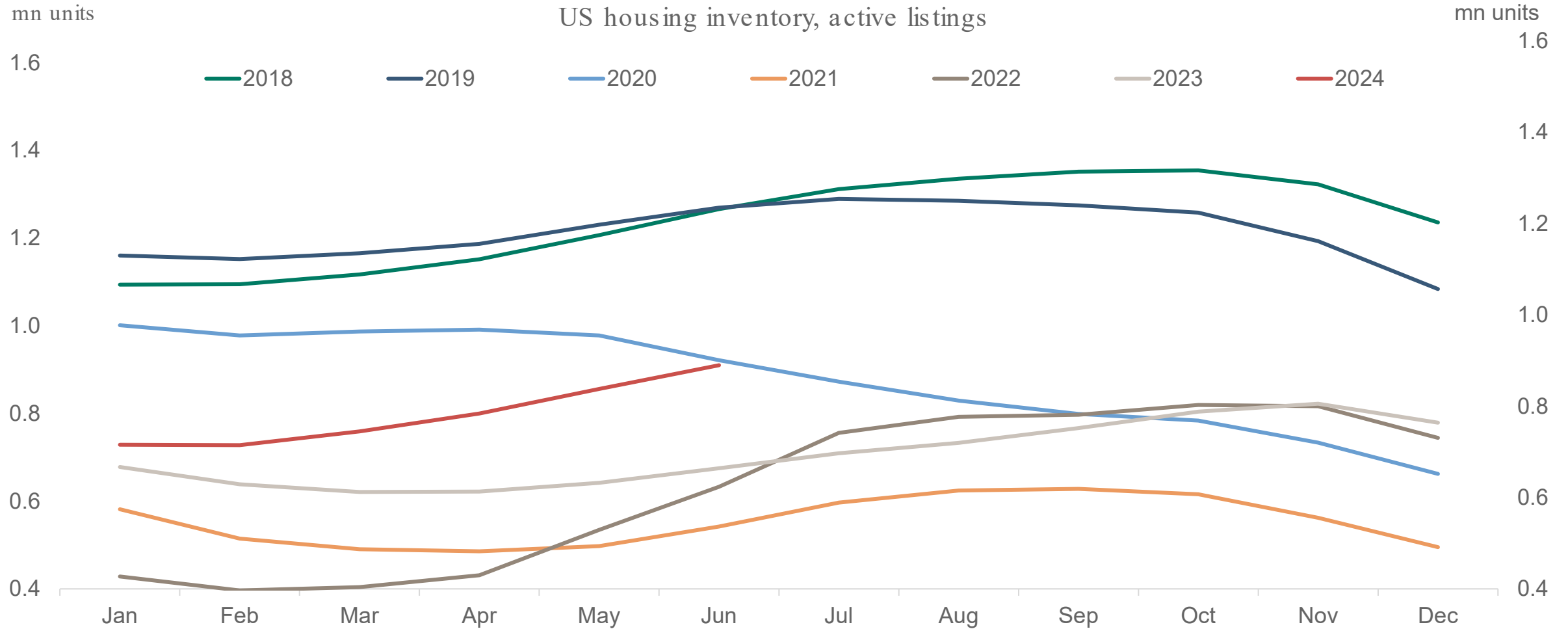
# Total housing inventory per person very low



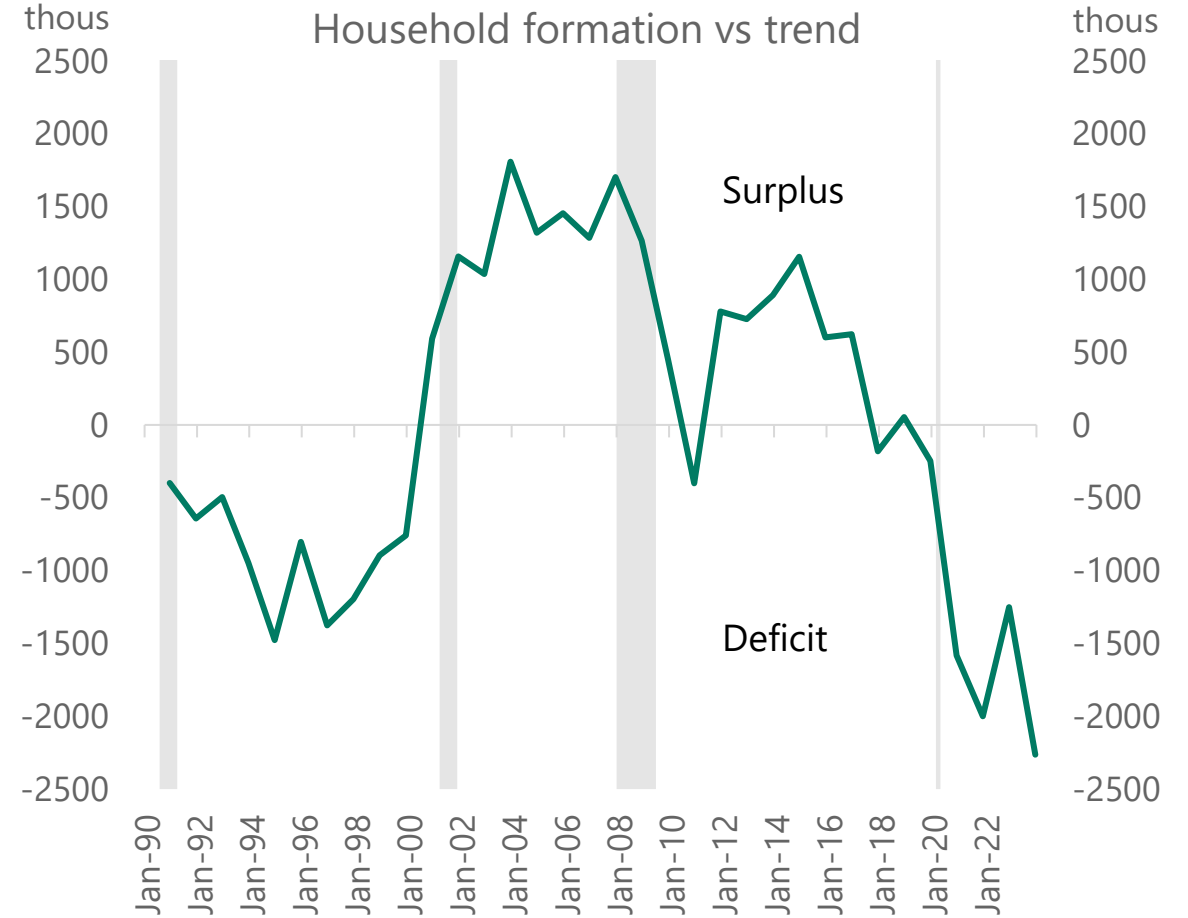
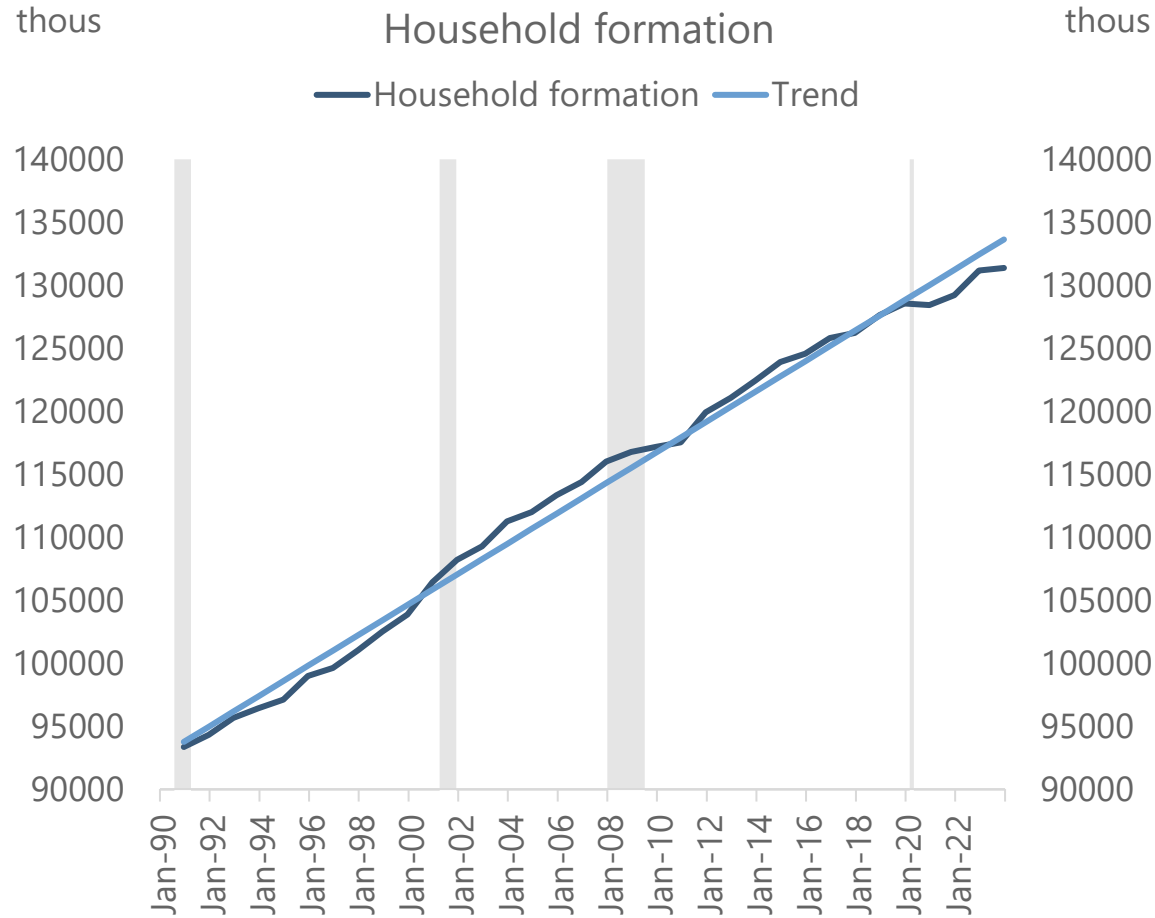
# Existing housing inventory very low



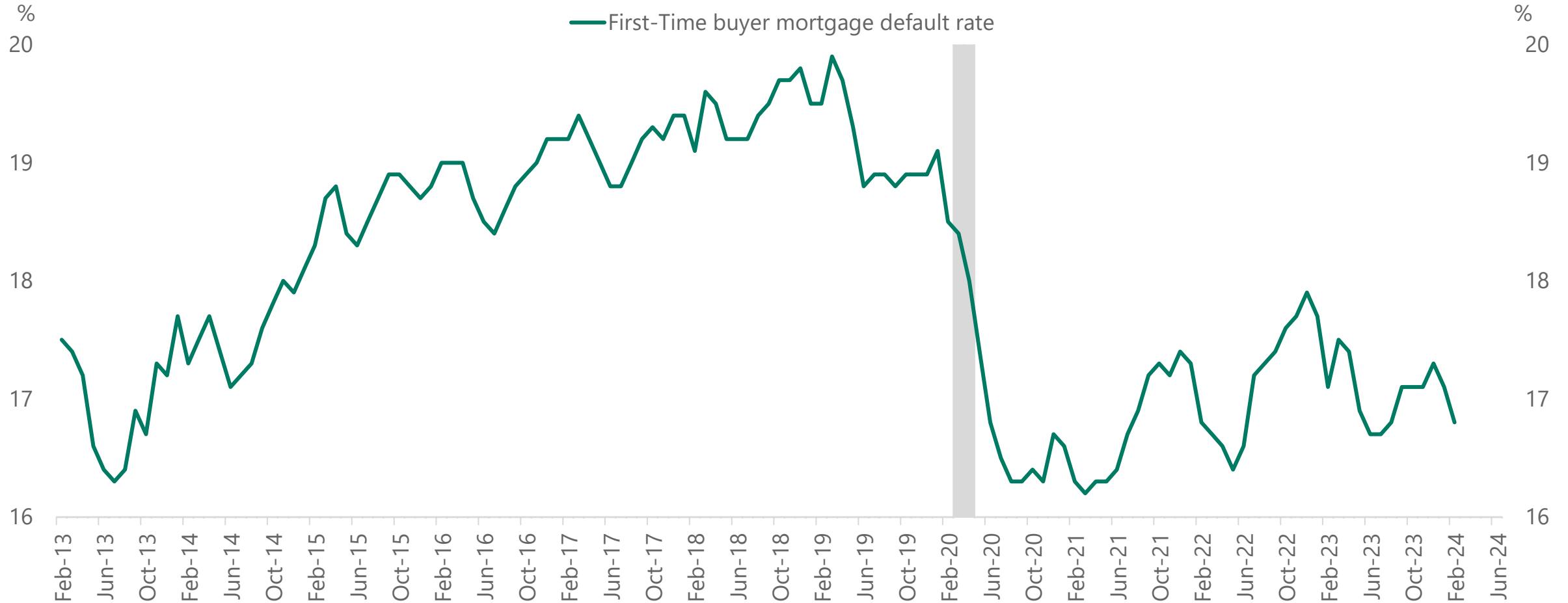
Low inventory of homes for sale. Has been rising for seasonal reasons.



# US has an estimated deficit of 2.3mn homes

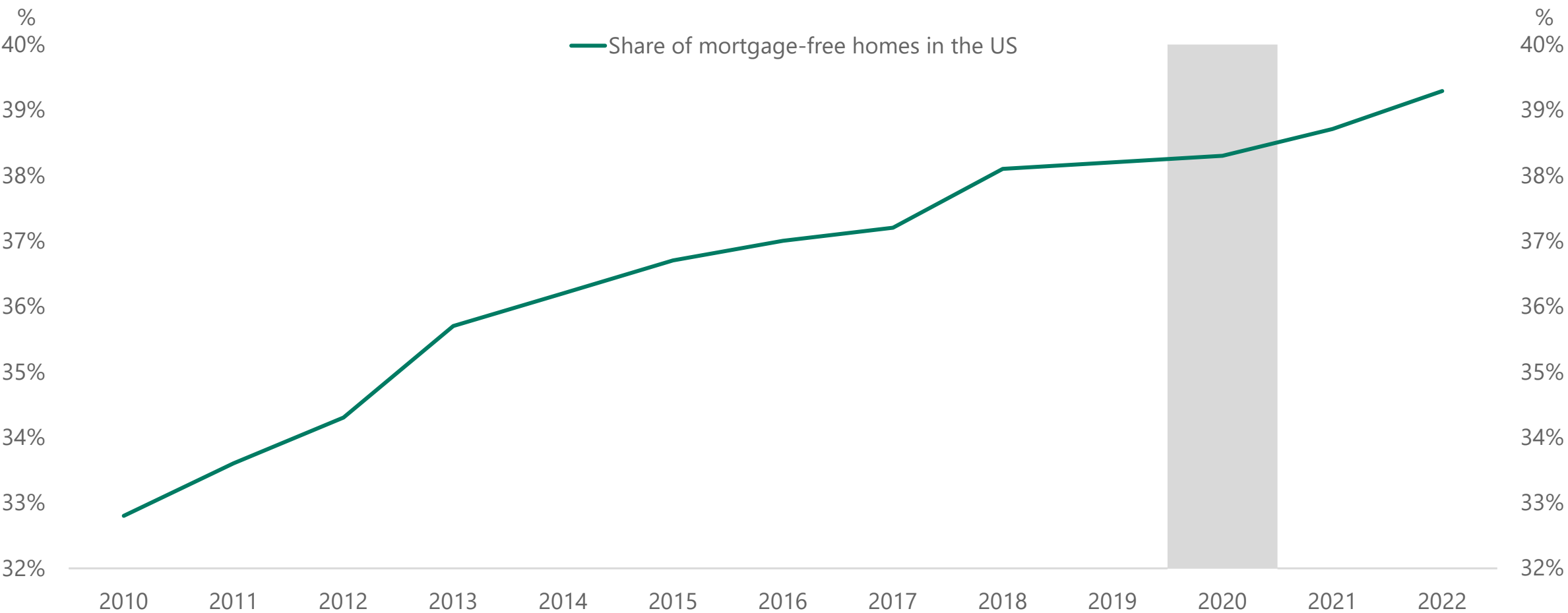


# Default rates very low for first-time homebuyers



Source: American Enterprise Institute, Haver Analytics, Apollo Chief Economist (Note: The First-time Buyer Mortgage Default Rate (FBMDR) is calculated using the same methodology as for the National Mortgage Default Rate (NMDR). The only difference is that the set of included loans is restricted to first-time buyers. It uses the default experience of loans originated in 2007 as a benchmark to quantify how new mortgage loans would perform if they were hit with a market collapse on par with the recent crisis. The index classifies loans as low-risk, medium-risk, and high-risk.)

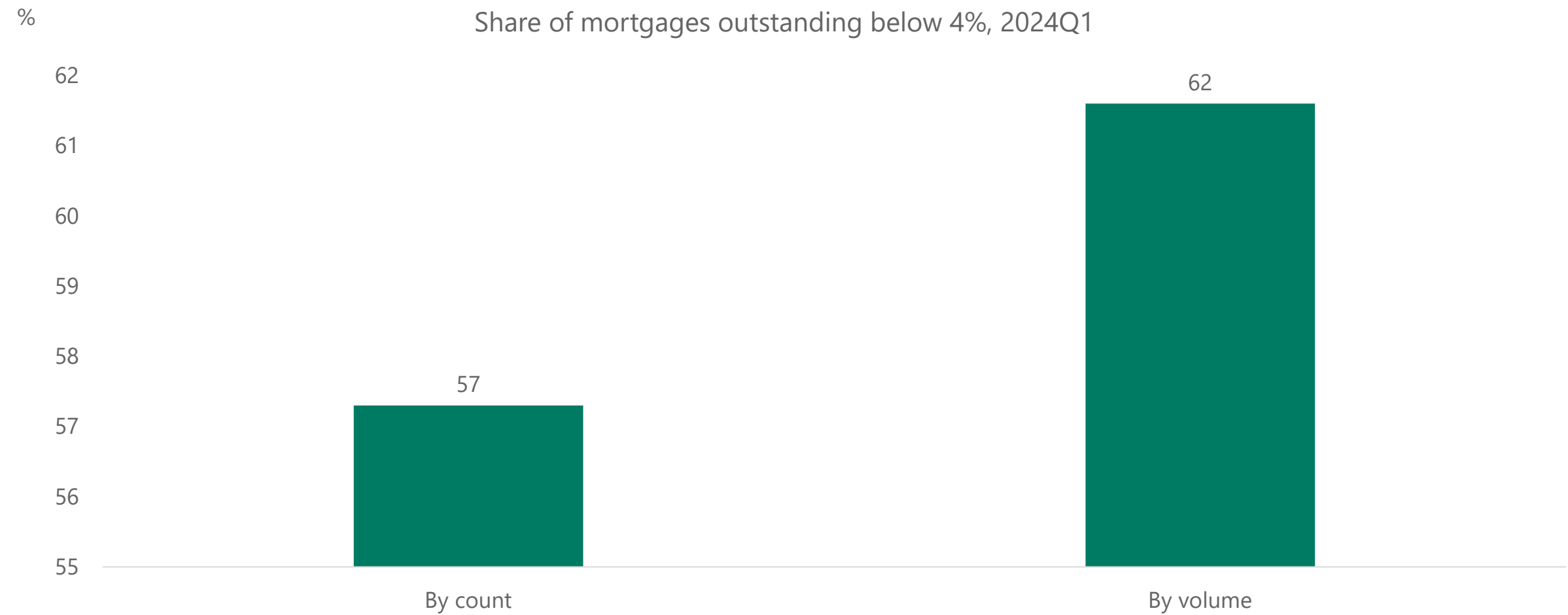
# Almost 40% of US homes don't have a mortgage



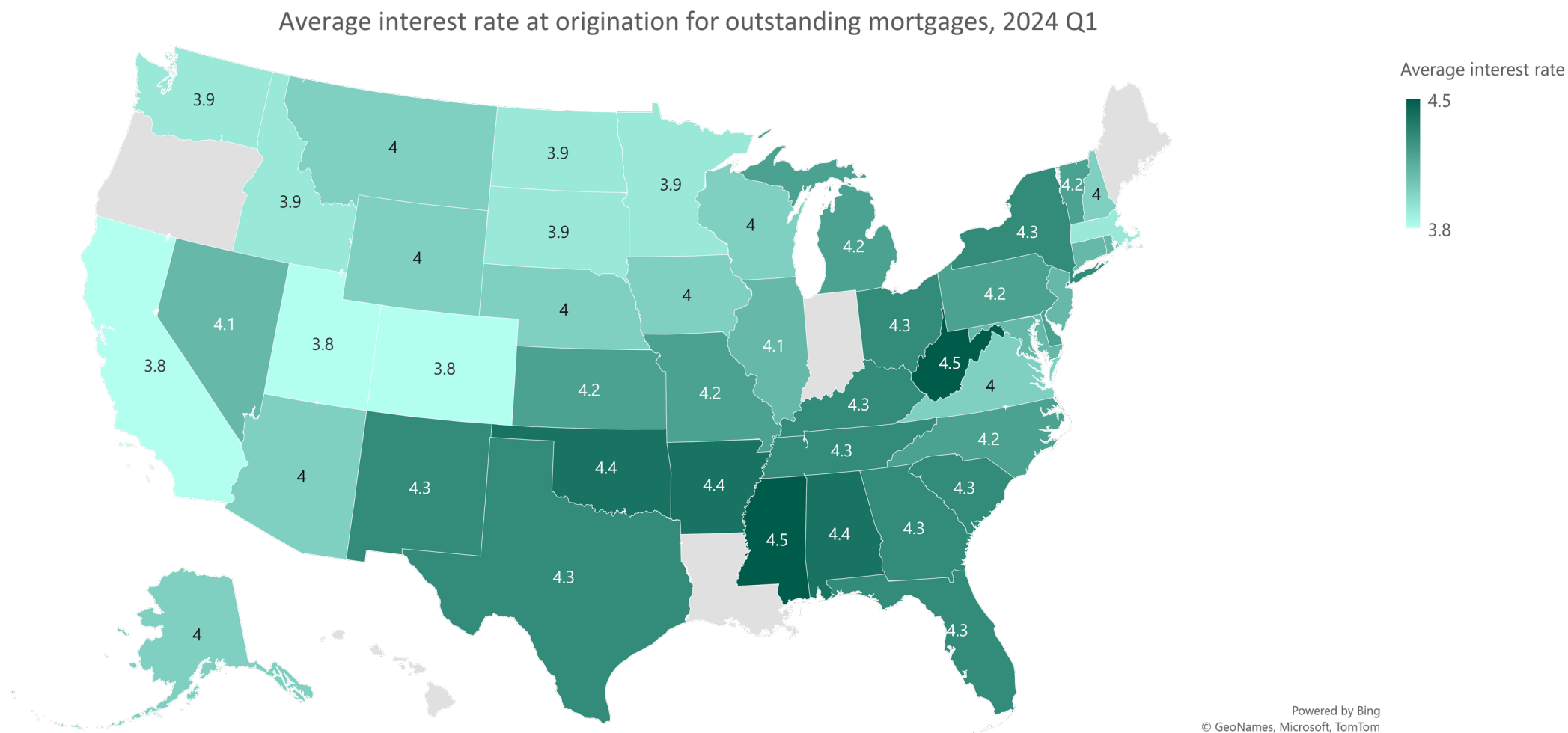
Source: US Census Bureau, Bloomberg, Apollo Chief Economist



# More than half of all mortgages outstanding have an interest rate below 4%

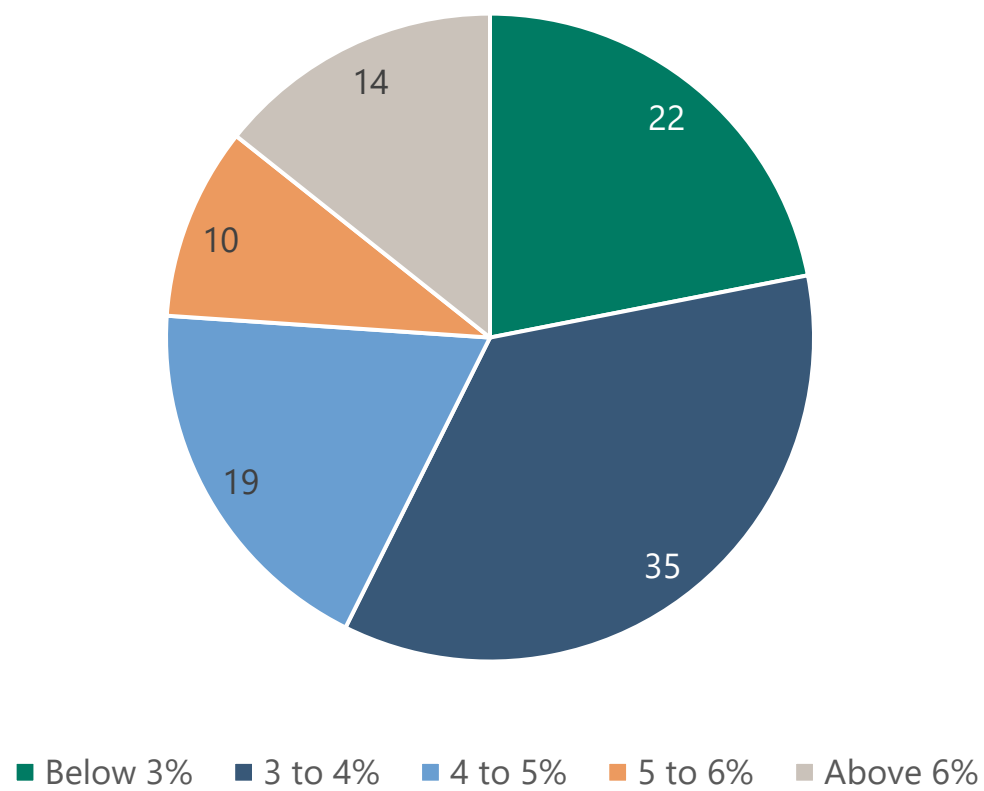


# Average interest rate at origination below current levels of 30-year fixed mortgage rate

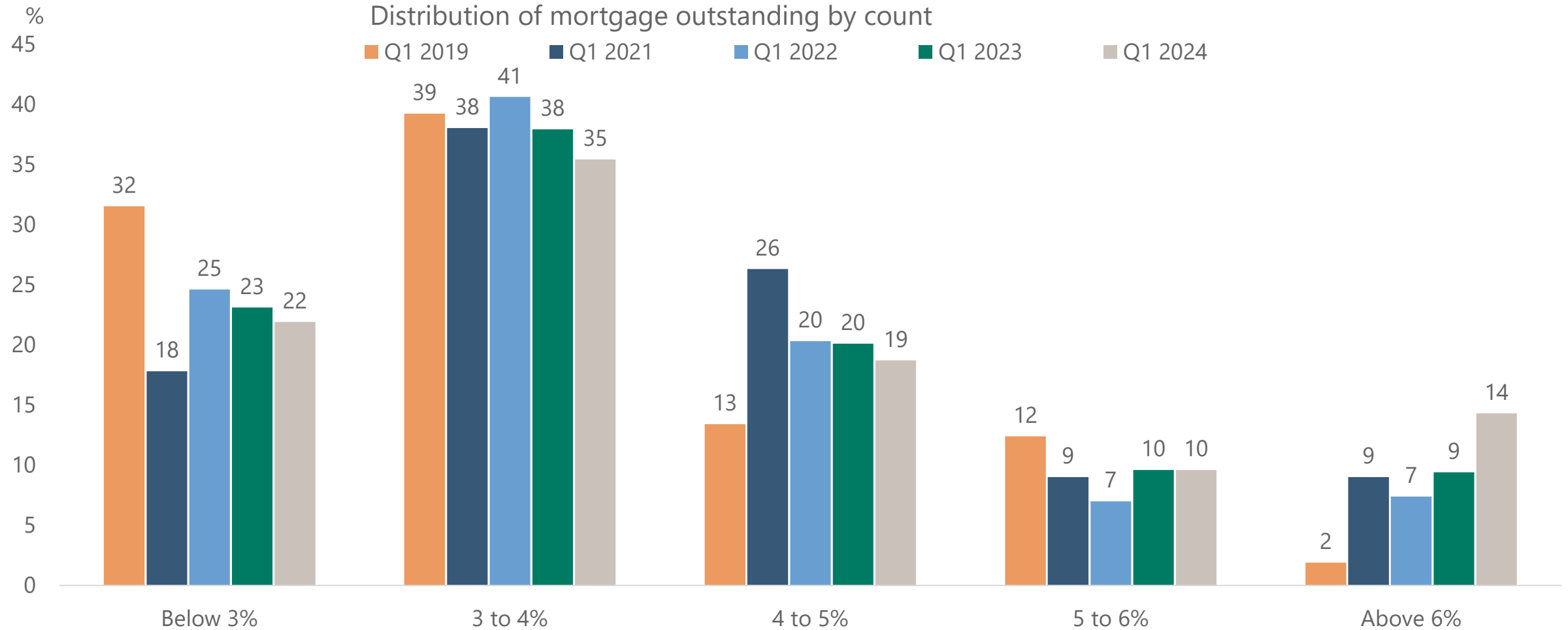


# Share of mortgages outstanding by interest rate

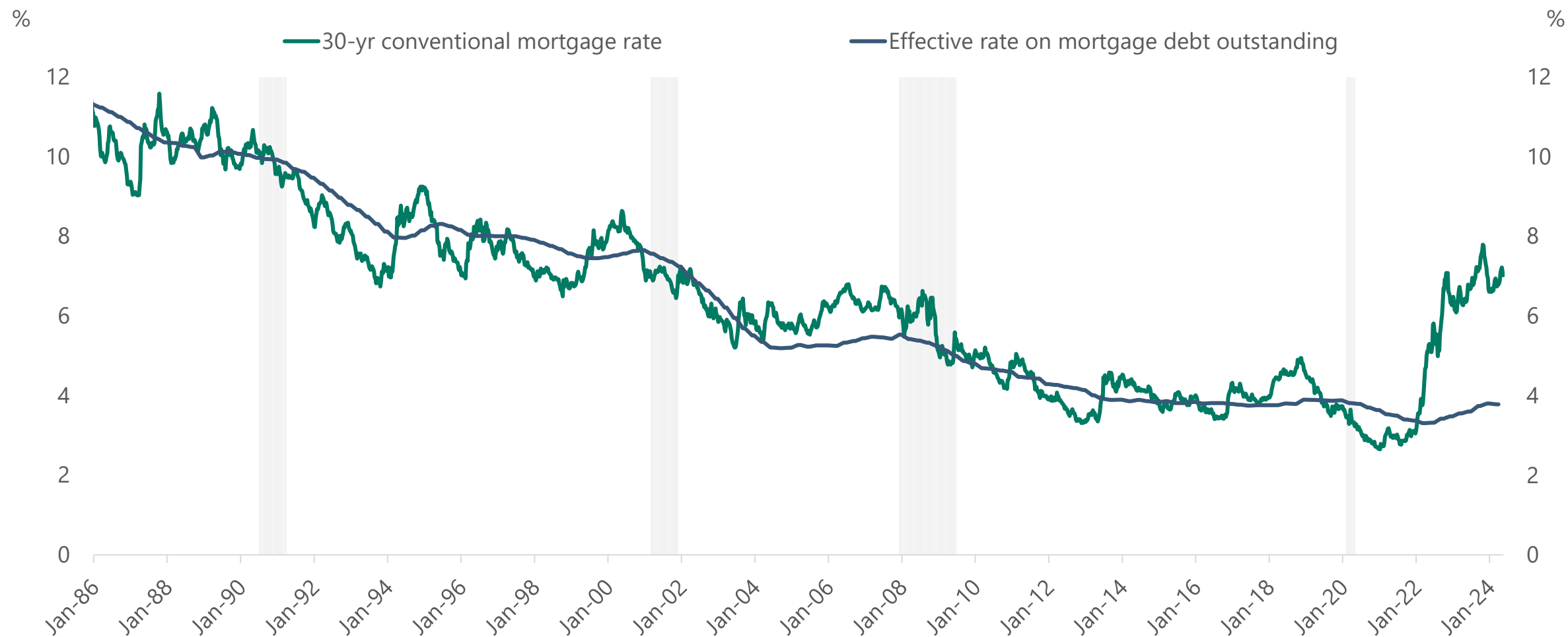
Share of mortgages outstanding by interest rate at origination by count, 2024 Q1



# Distribution of interest rates on outstanding mortgages

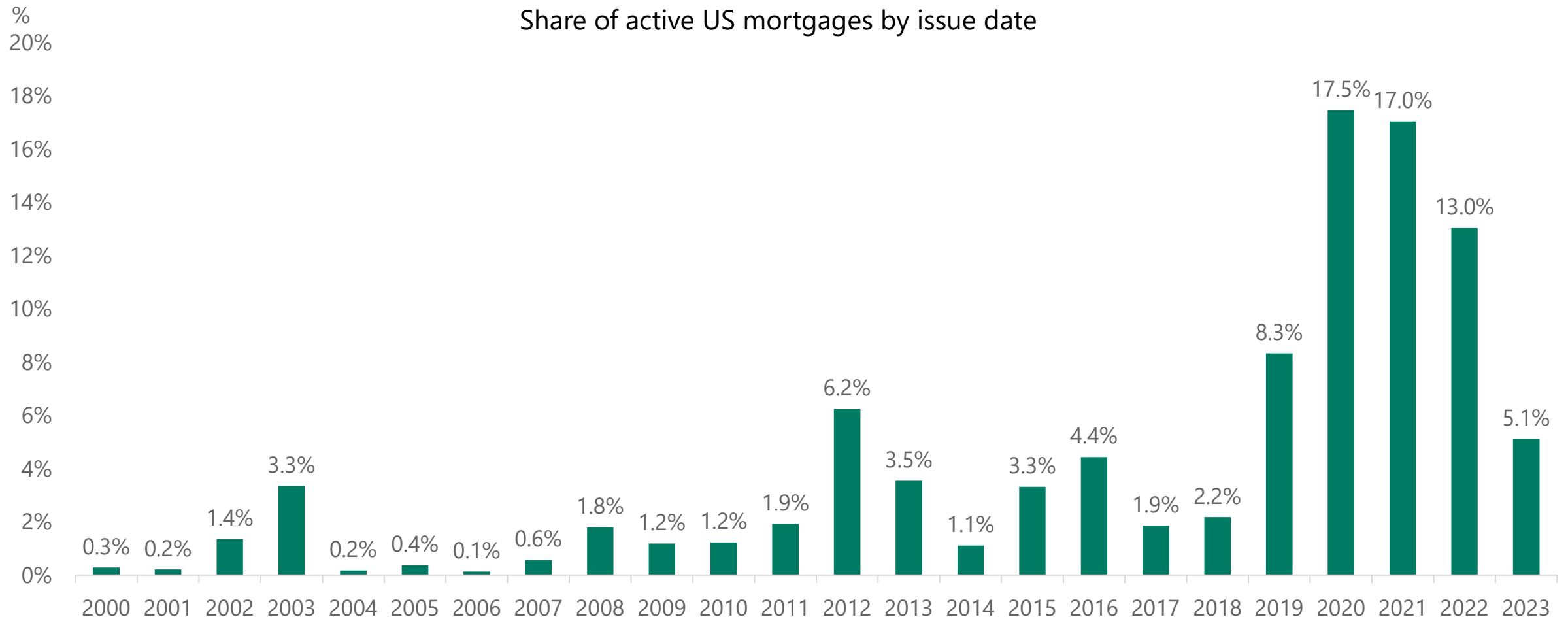


# Effective outstanding mortgage rate is 3.8%



Source: Freddie Mac, BEA, Bloomberg, Apollo Chief Economist. The effective interest rate (%) reflects the amortization of initial fees and charges over a 10-year period, which is the historical assumption of the average life of a mortgage loan.

# 63% of all mortgages outstanding were issued after 2018



# Monthly mortgage payment on a new mortgage is around \$3000



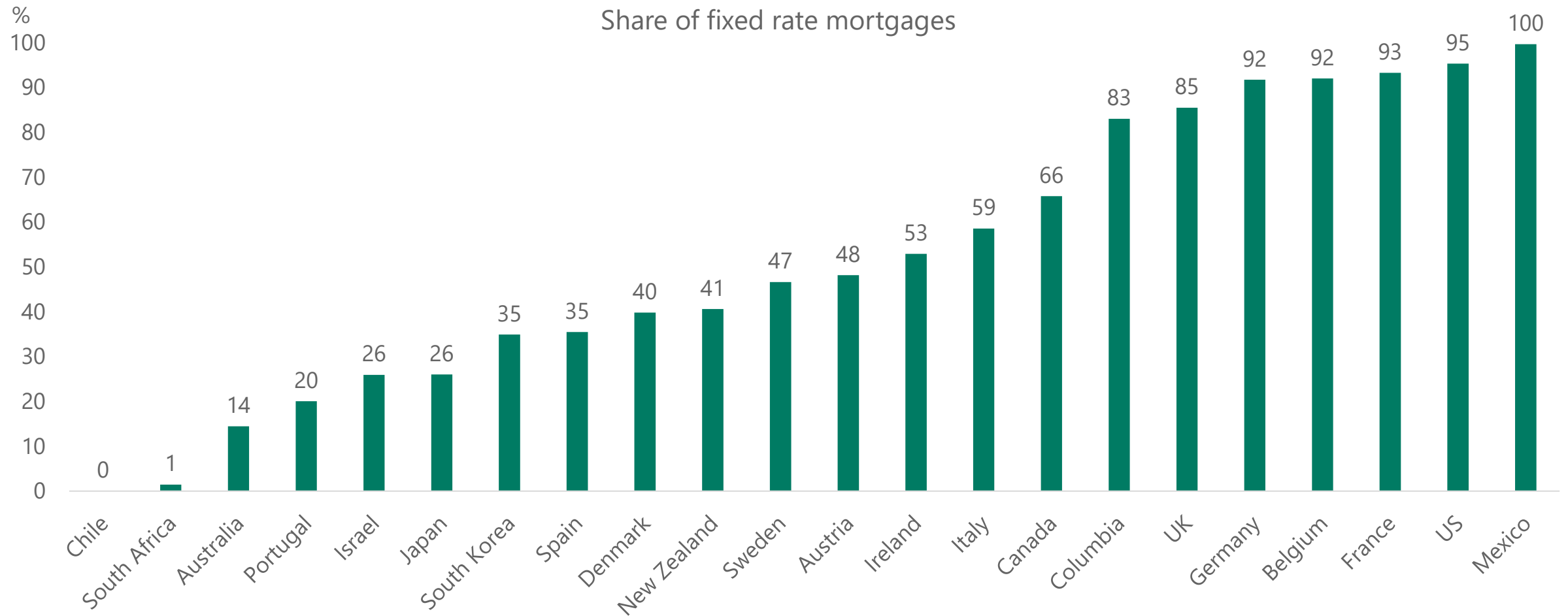
Source: Bloomberg L.P., Apollo Chief Economist (Note: Calculation of monthly payment using the 30-year purchase loan application size and the 30-yr effective rate.)

# ARM share of total mortgage applications declined to 8%

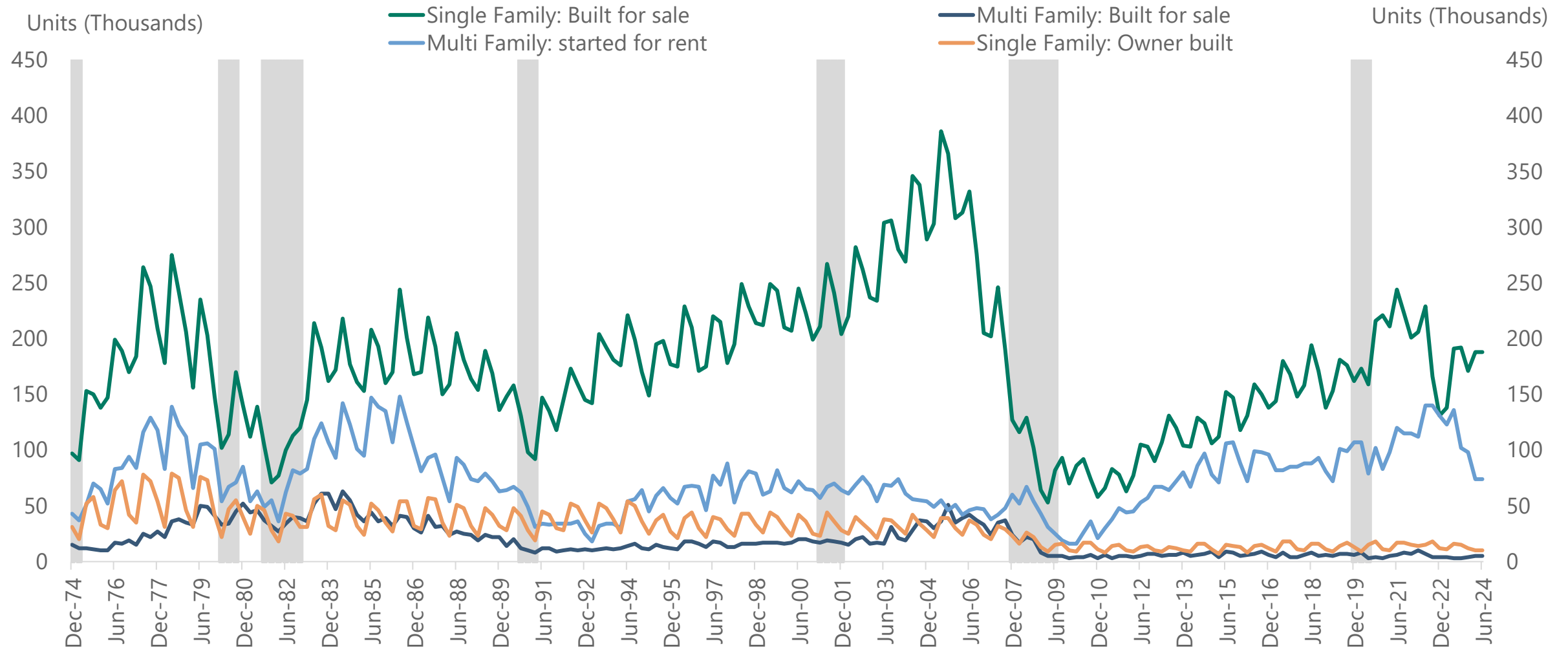




# Share of fixed rate mortgages by country



# Intent of housing starts: Multi family for rent declining. Single family for sale rising.

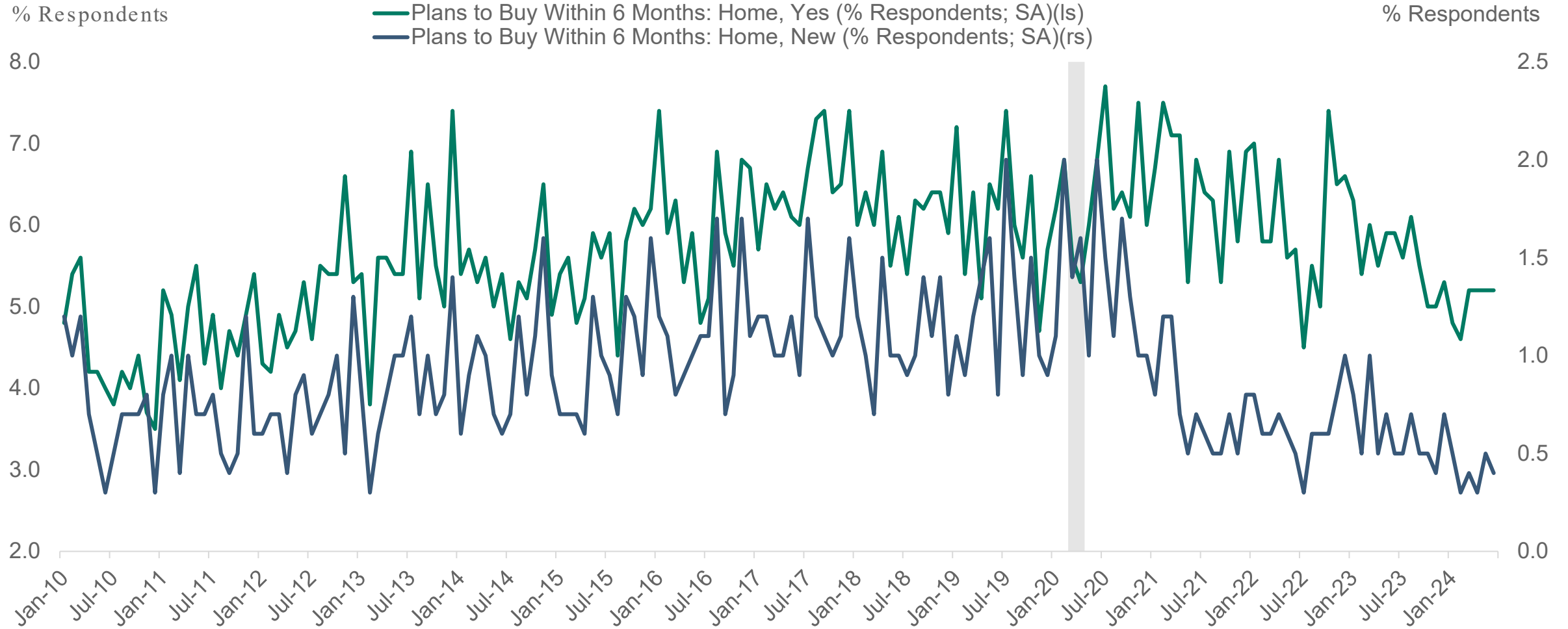


1) Housing Demand: High mortgage rates, high home prices, and rising unemployment slowing demand

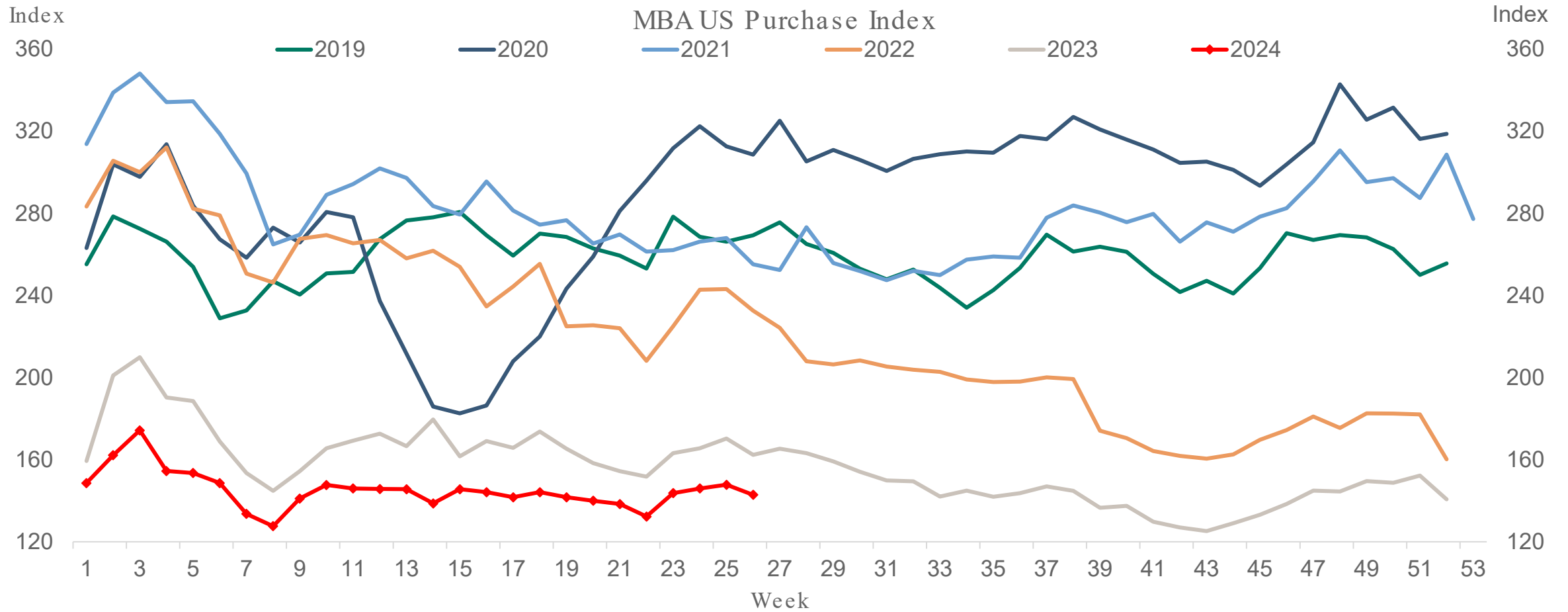
# Any additional increase in the unemployment rate could be a risk to housing demand



# Home buying plans

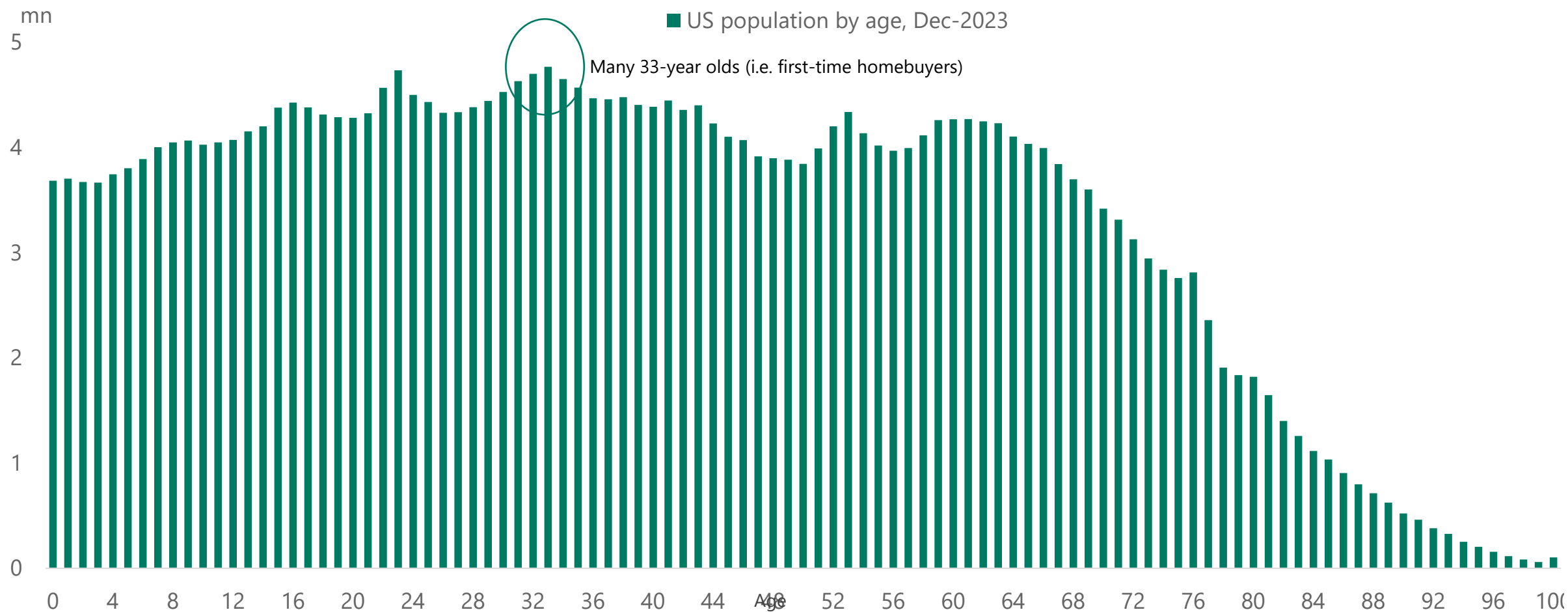


# Mortgage purchase applications remain much lower than normal



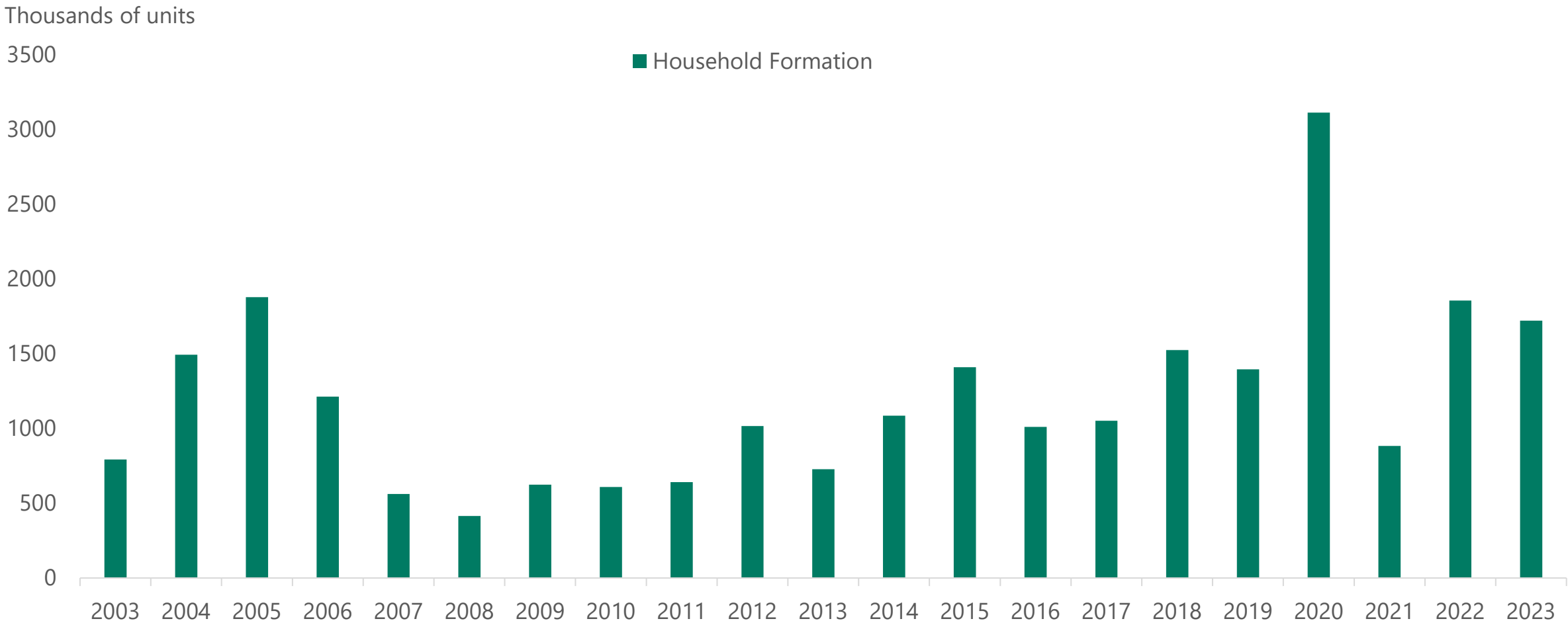


# Demographics are a tailwind to housing demand



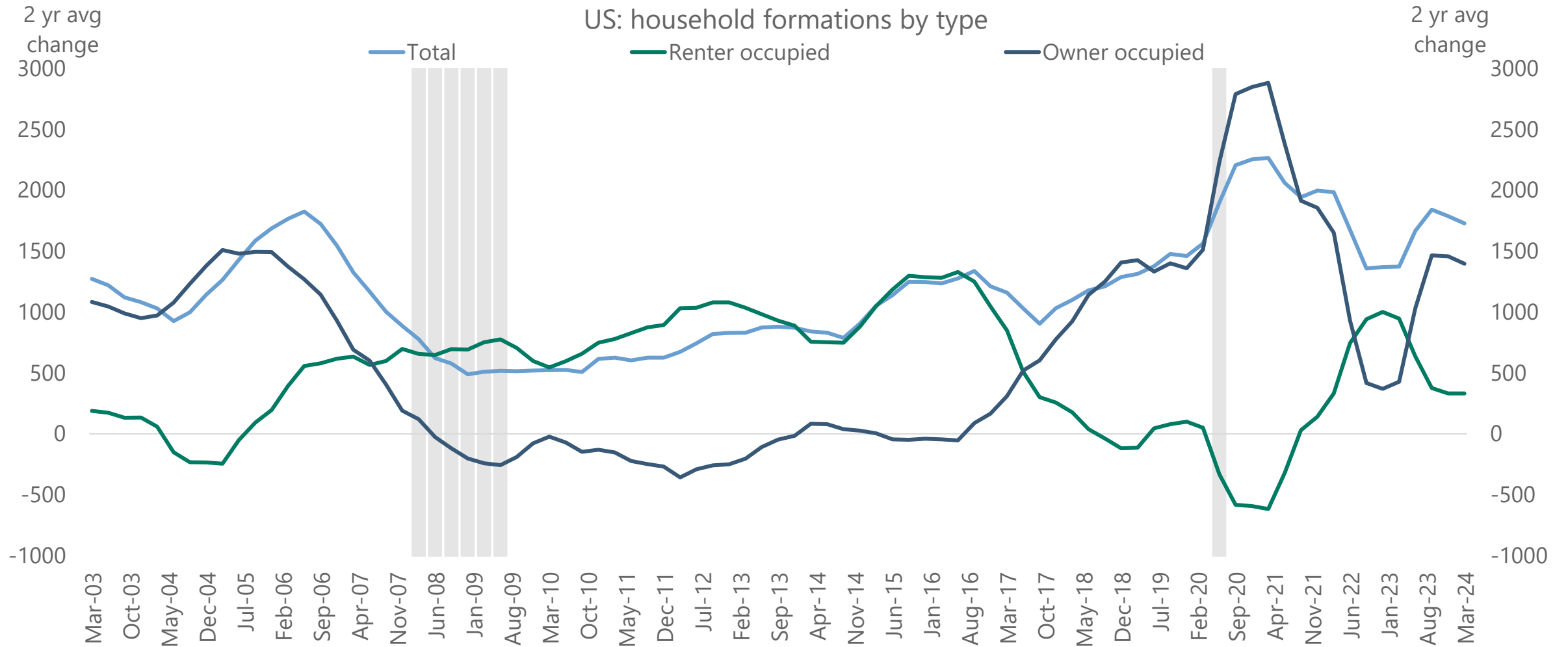


# Rebounding household formation is a tailwind to housing

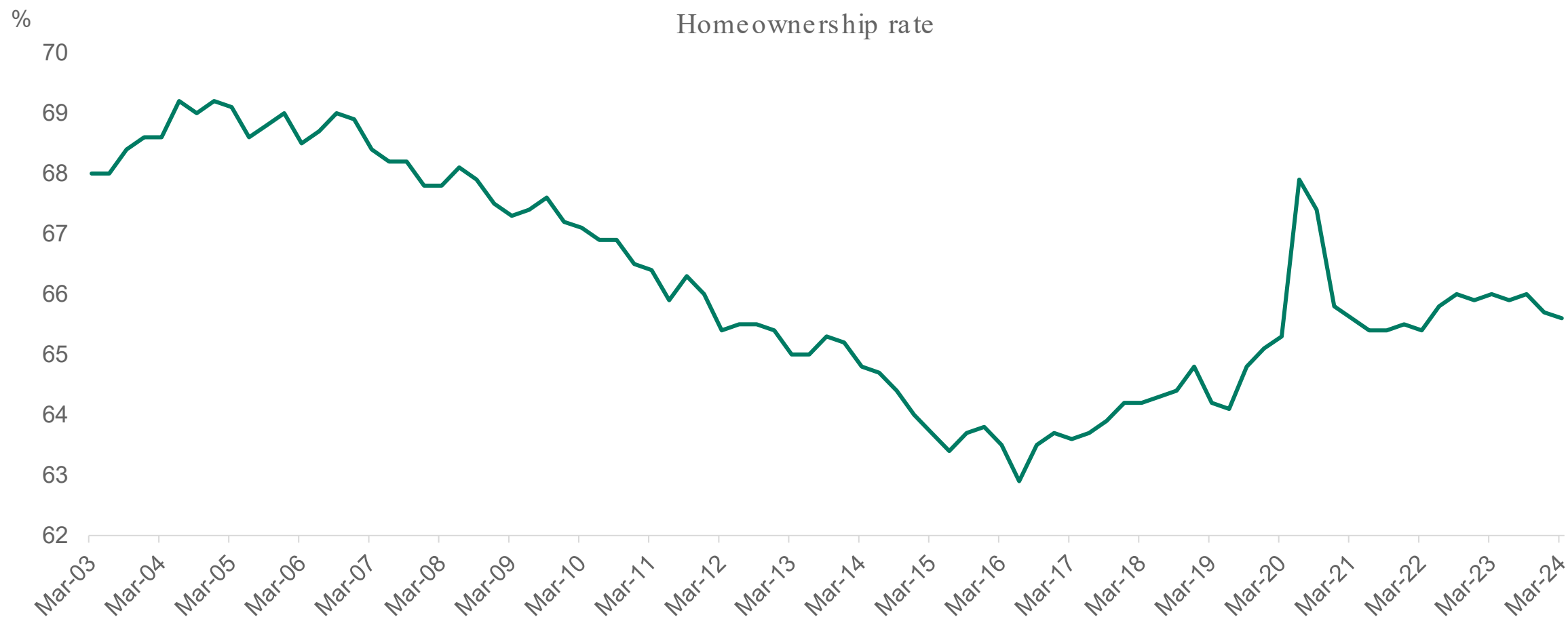


Source: Census Bureau, Haver, Apollo Chief Economist

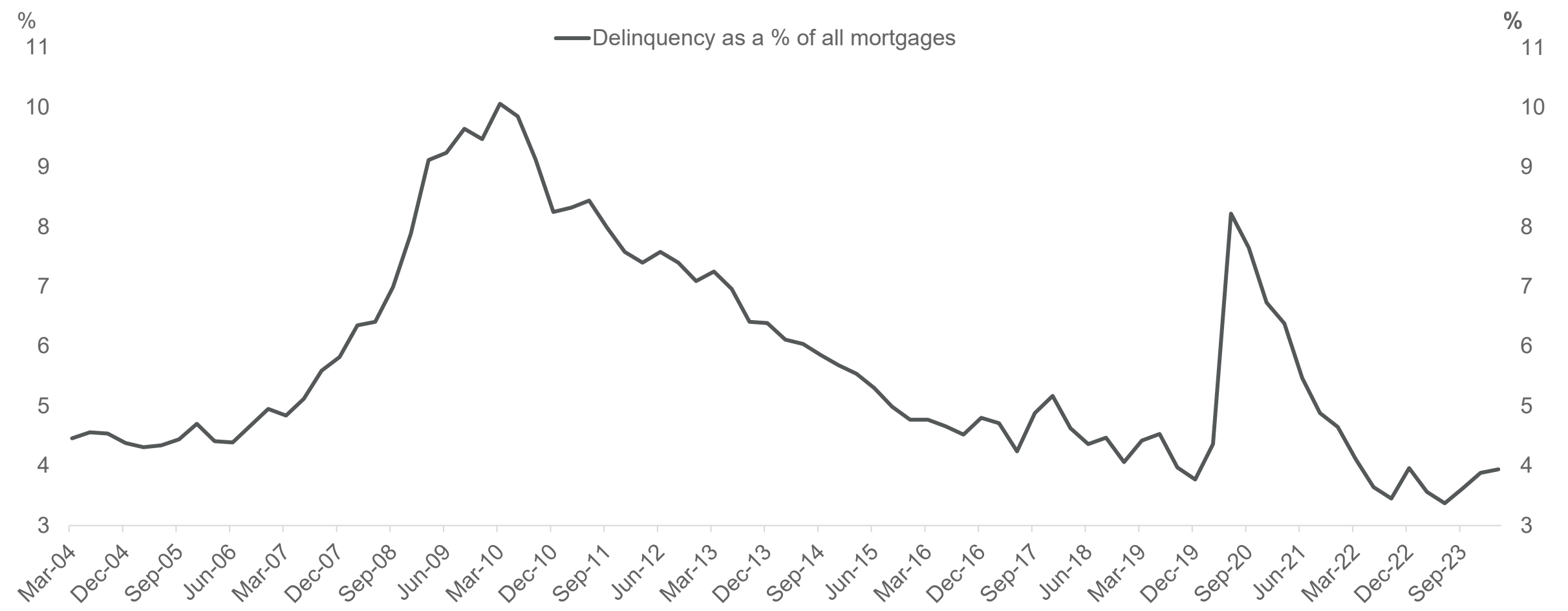
# Decline in the number of renters recently



# Homeownership rate moving sideways

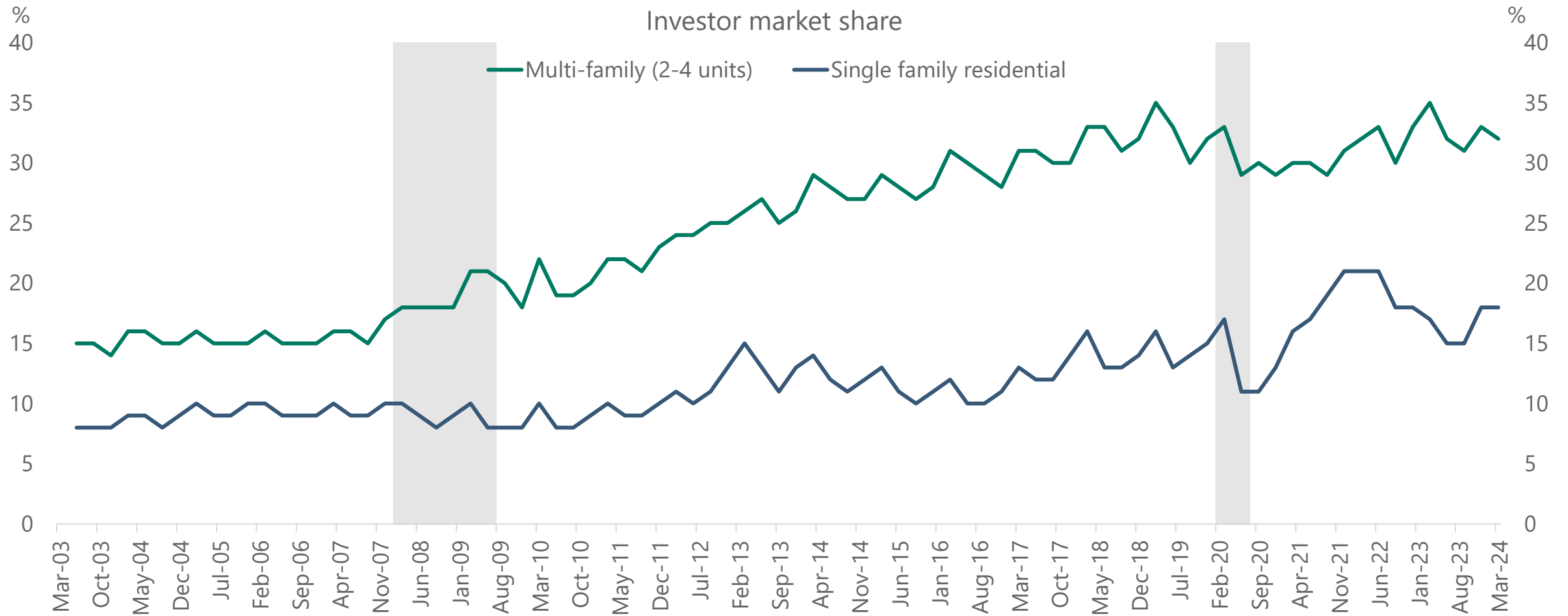


# Delinquency rate for mortgages very low

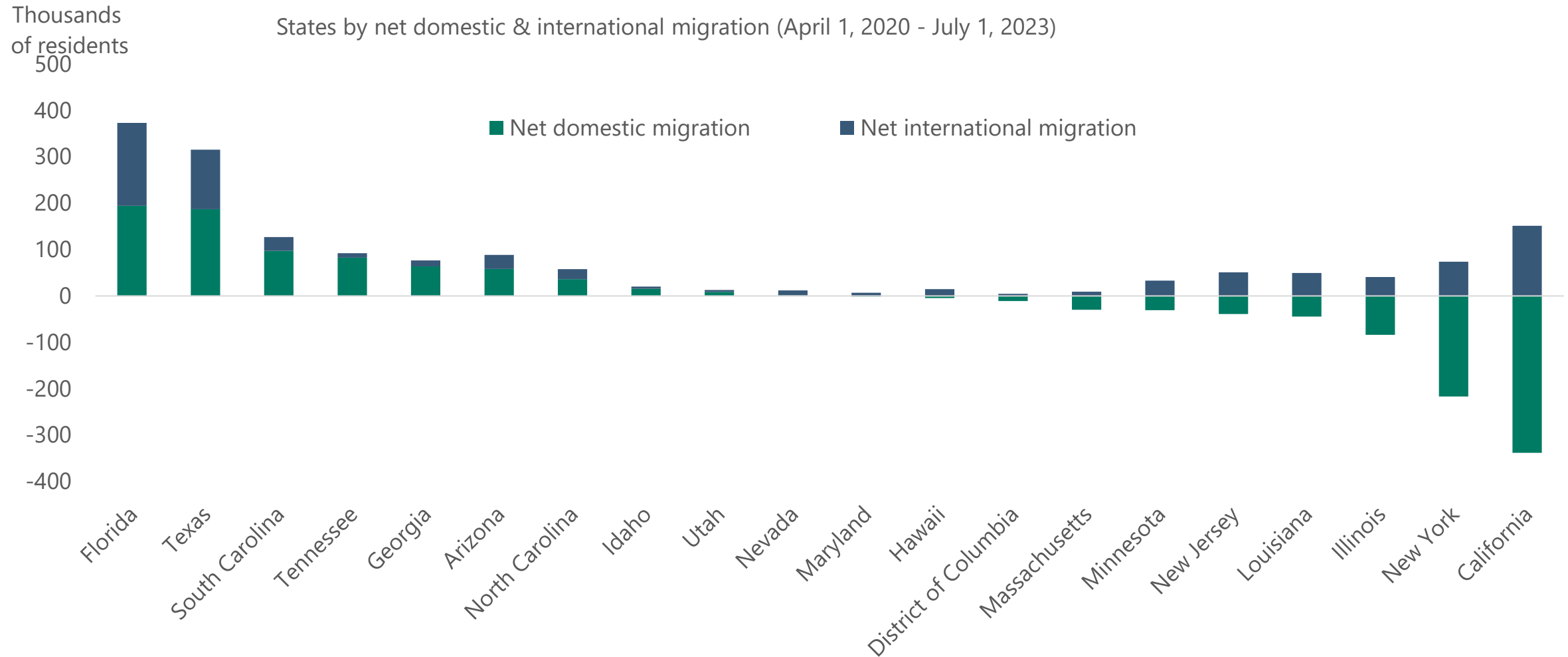


Source: Bloomberg, Apollo Chief Economist

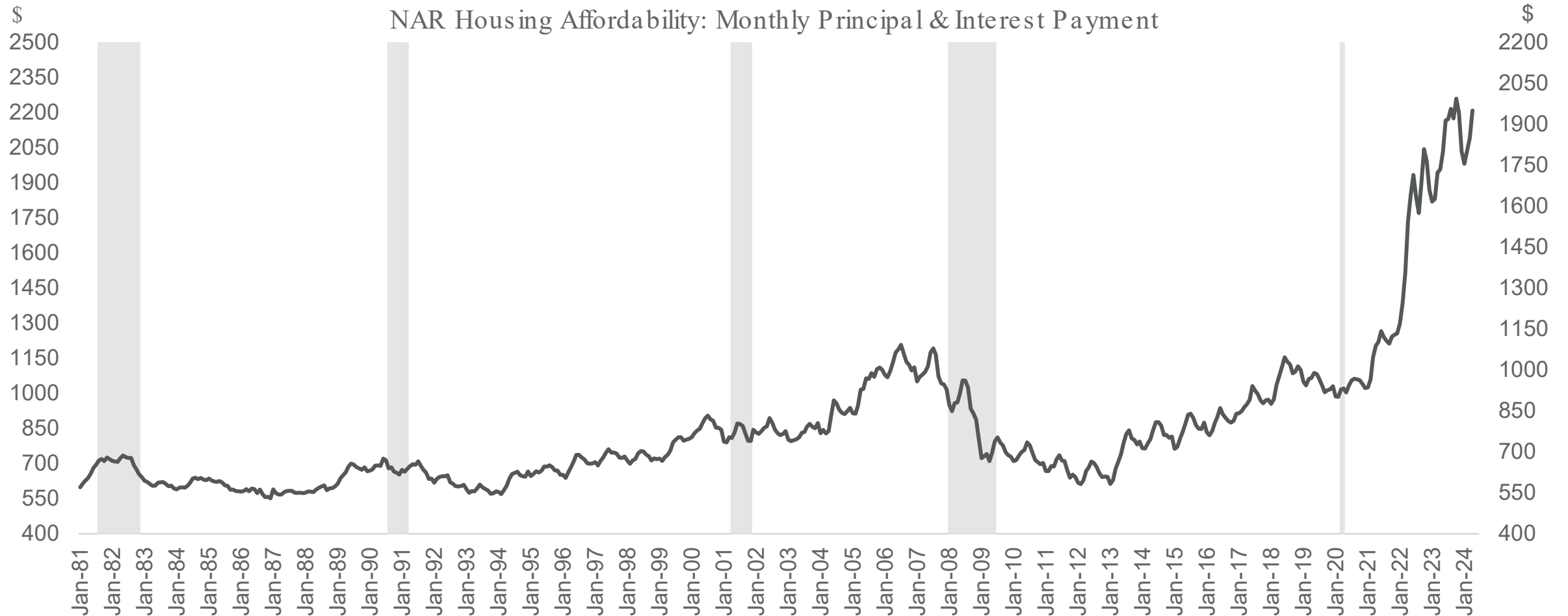
# Investor share of single-family has stable



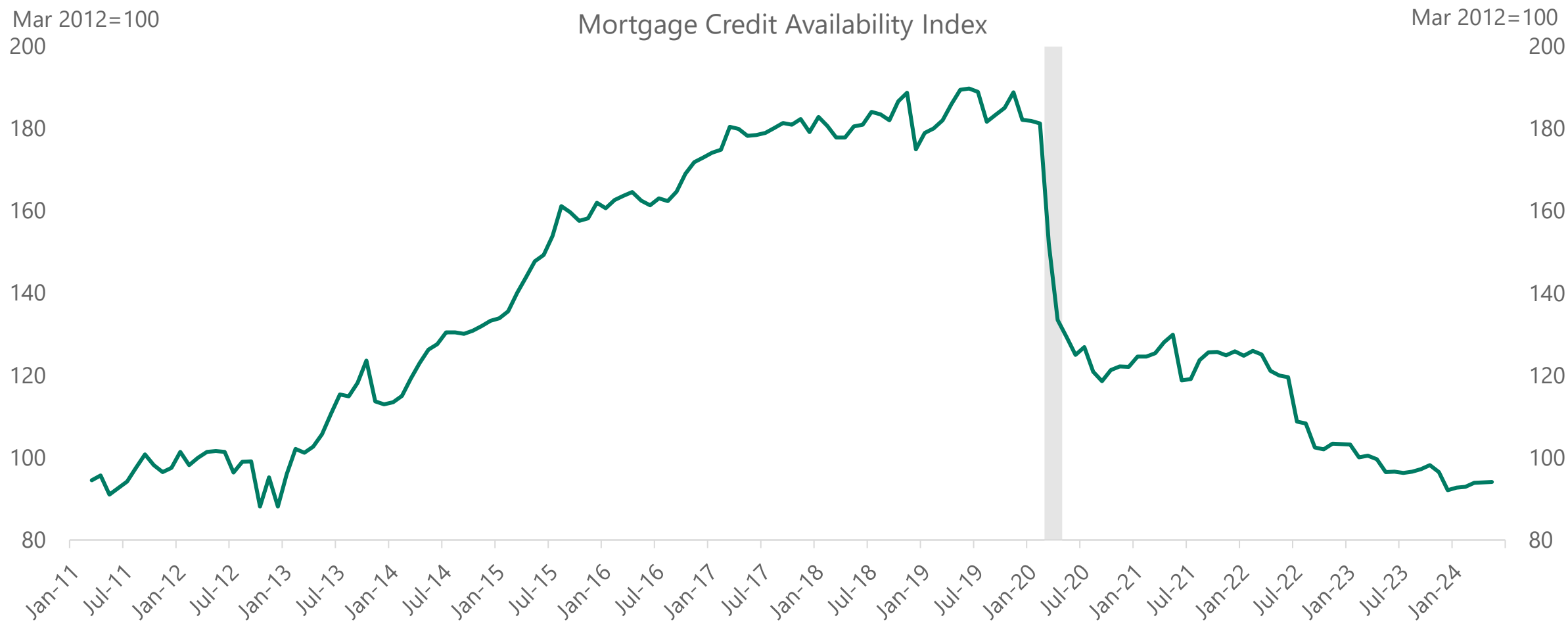
# Migration out of California and migration into Florida during the pandemic



# Monthly mortgage payments on new mortgages have doubled since 2021

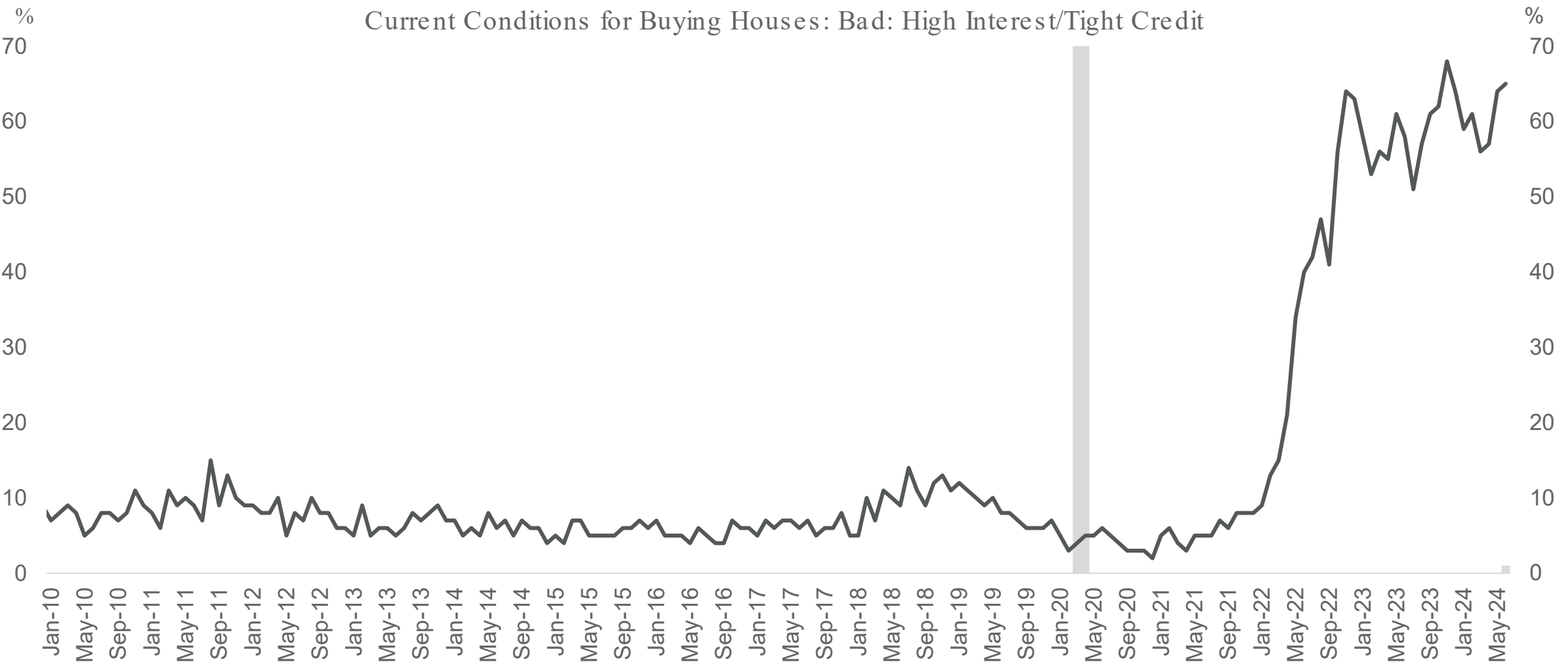


# Availability of mortgage credit at tight levels



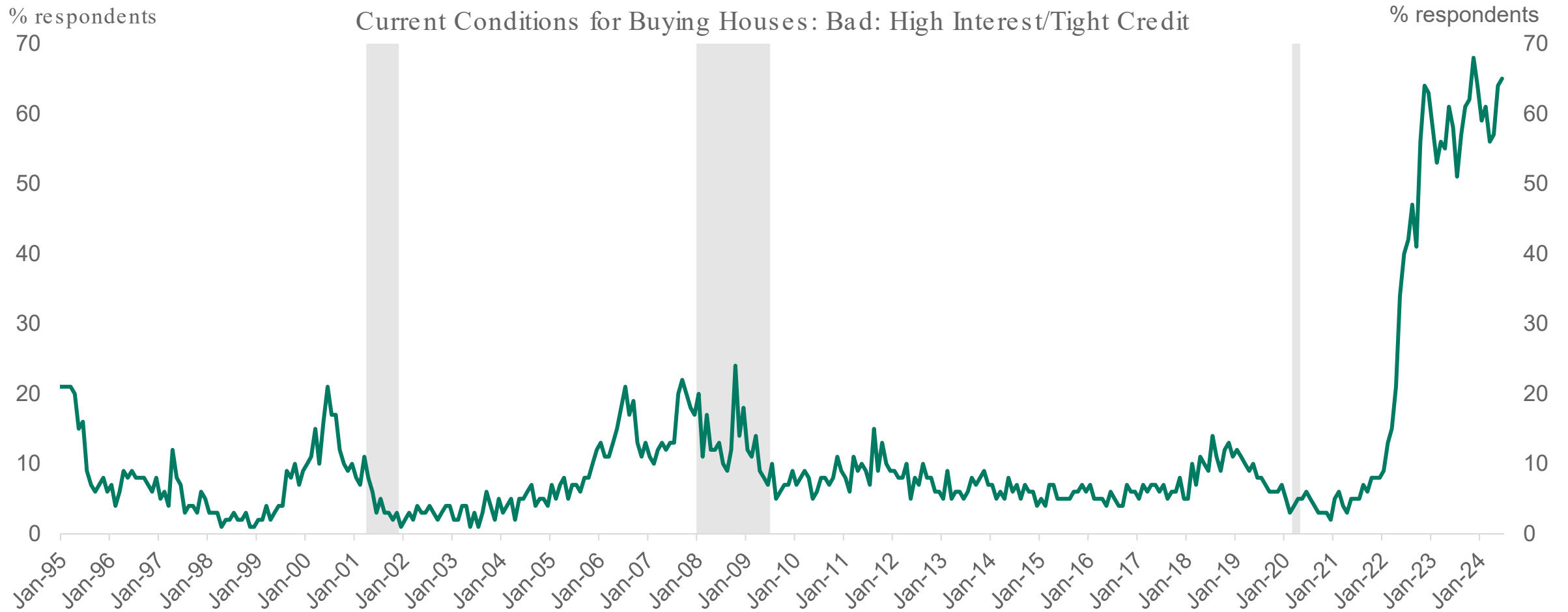


# Homebuyer sentiment negatively impacted by high prices

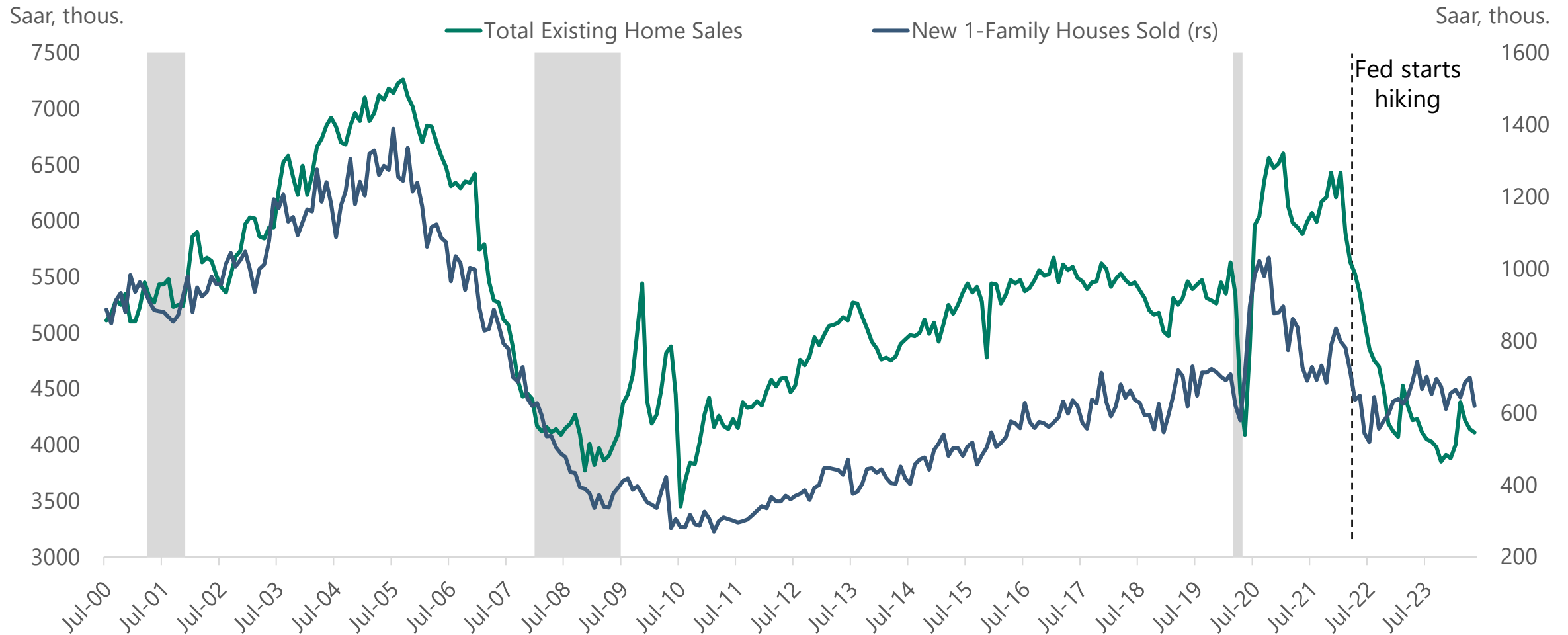


Source: University of Michigan, Apollo Chief Economist

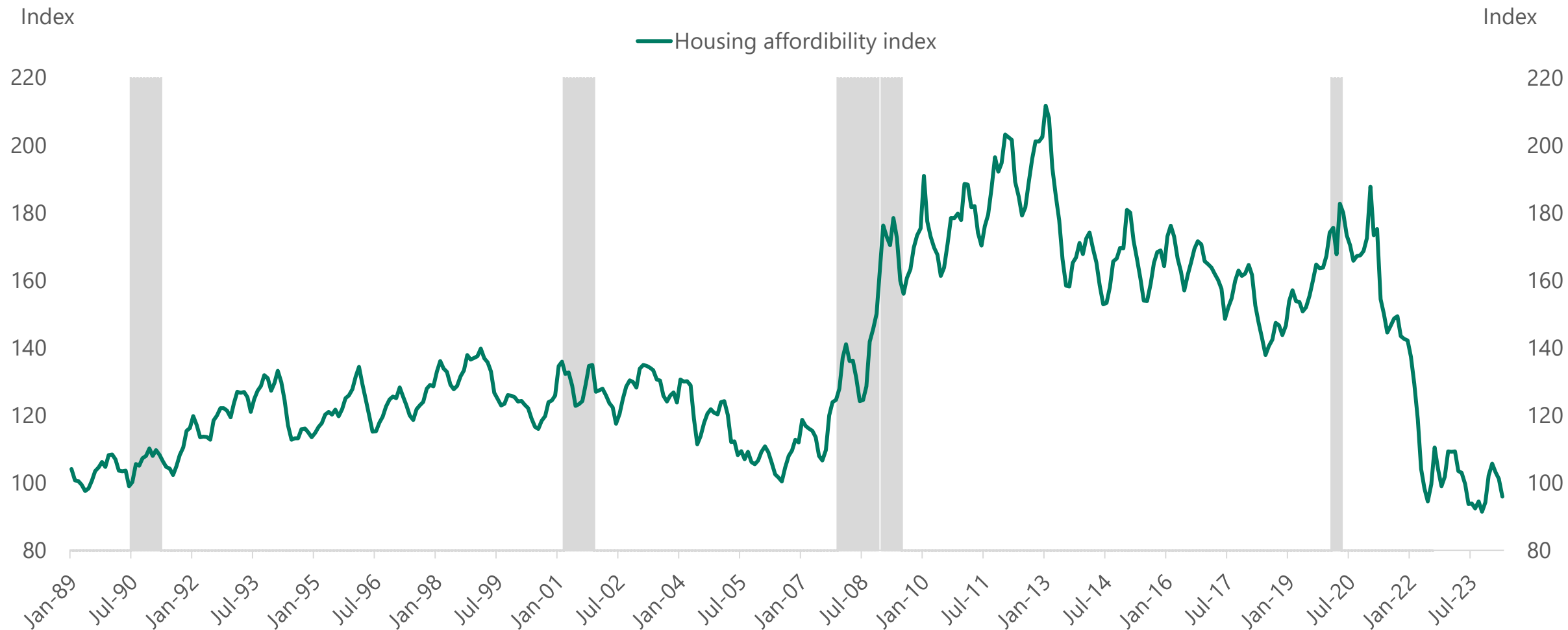
65% of consumers are saying that this is a bad time to buy a house because of high mortgage rates and tight credit



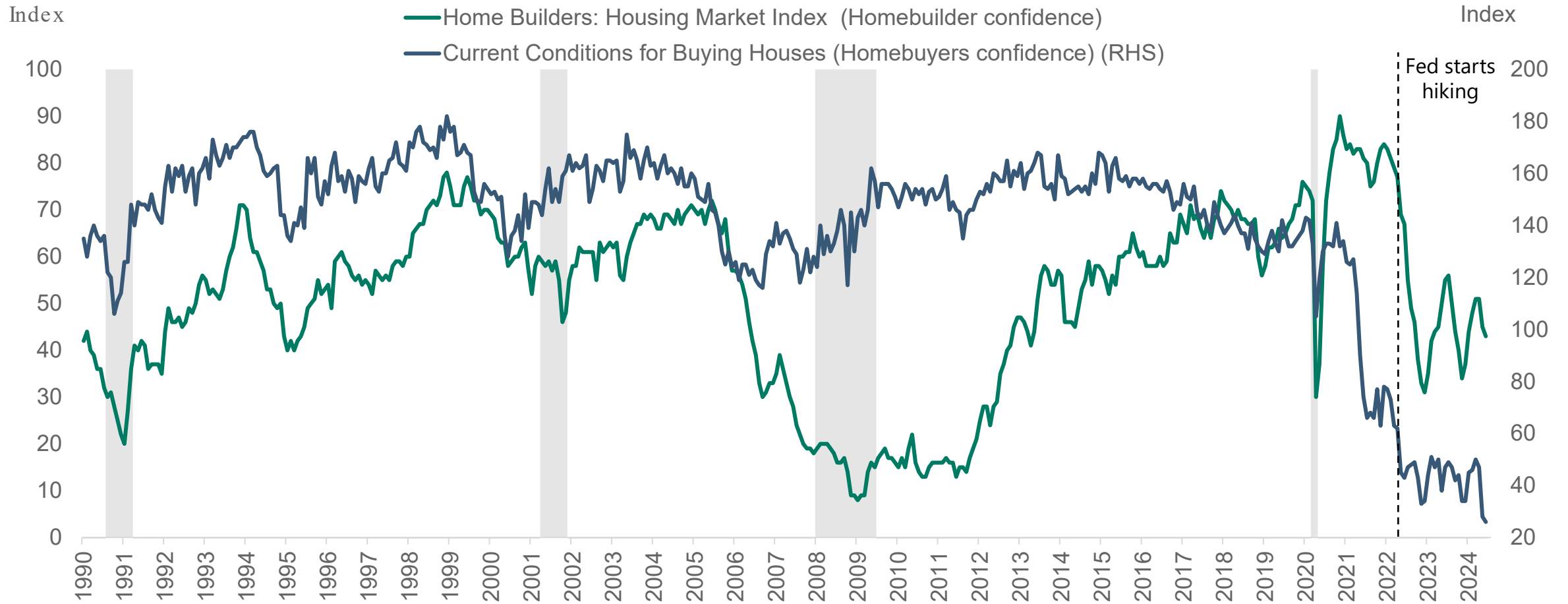
# New and existing home sales lower than normal because of affordability



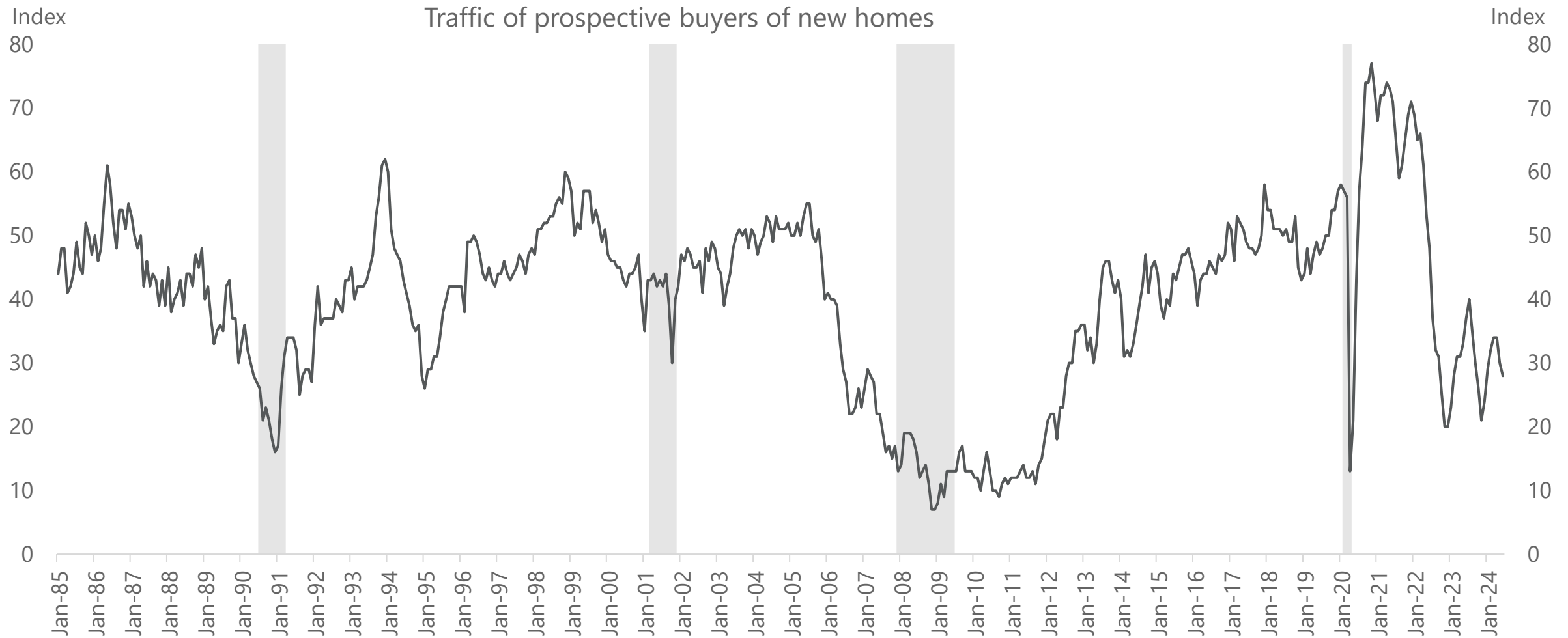
# Housing affordability near record lows



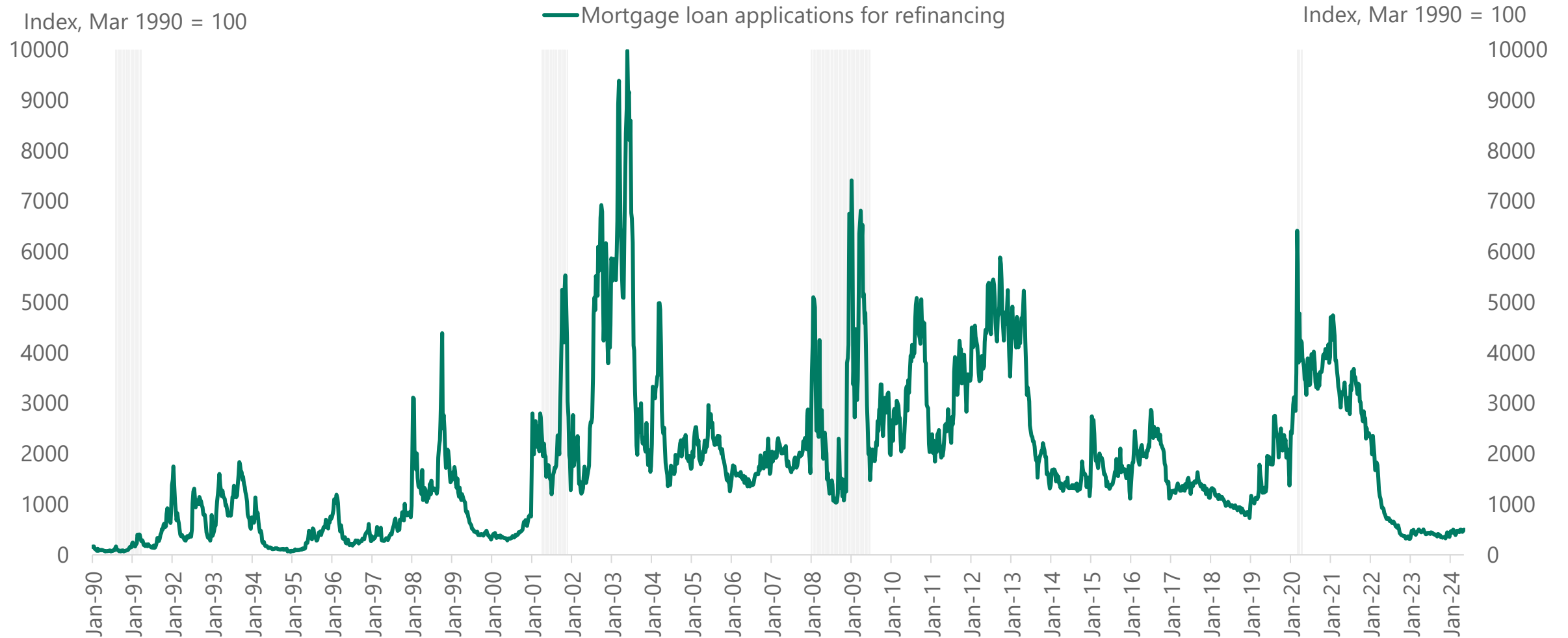
# Homebuyer and homebuilder confidence still depressed because of affordability



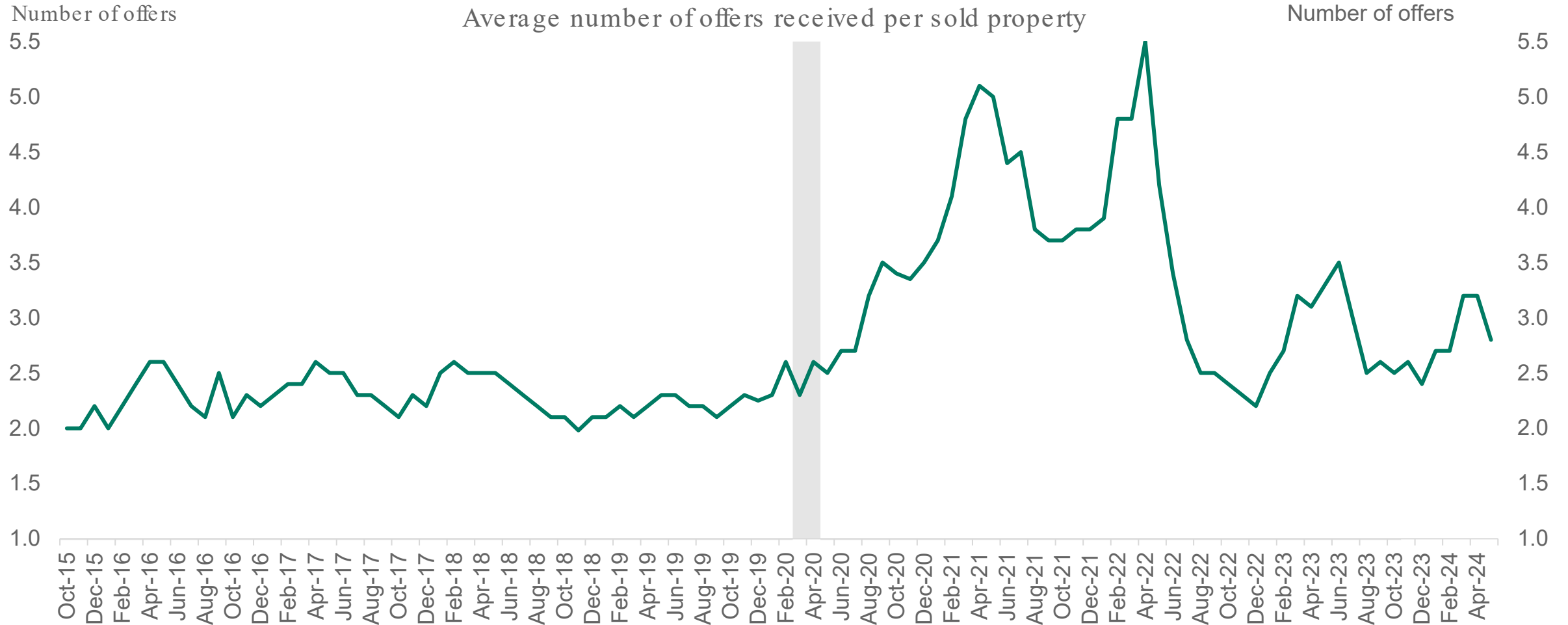
# Traffic of prospective homebuyers lower than normal, likely because of affordability



# Low number of homeowners are refinancing their mortgage at the moment



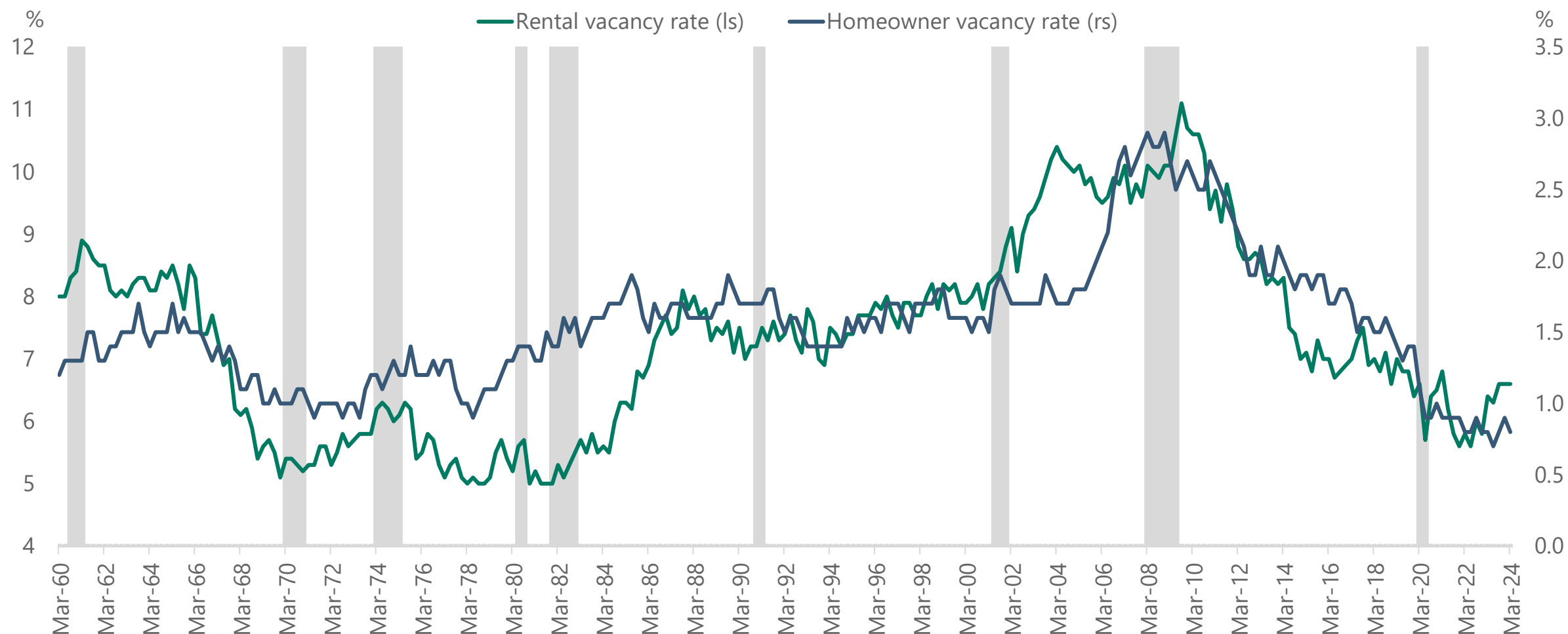
# Fewer bidding wars recently



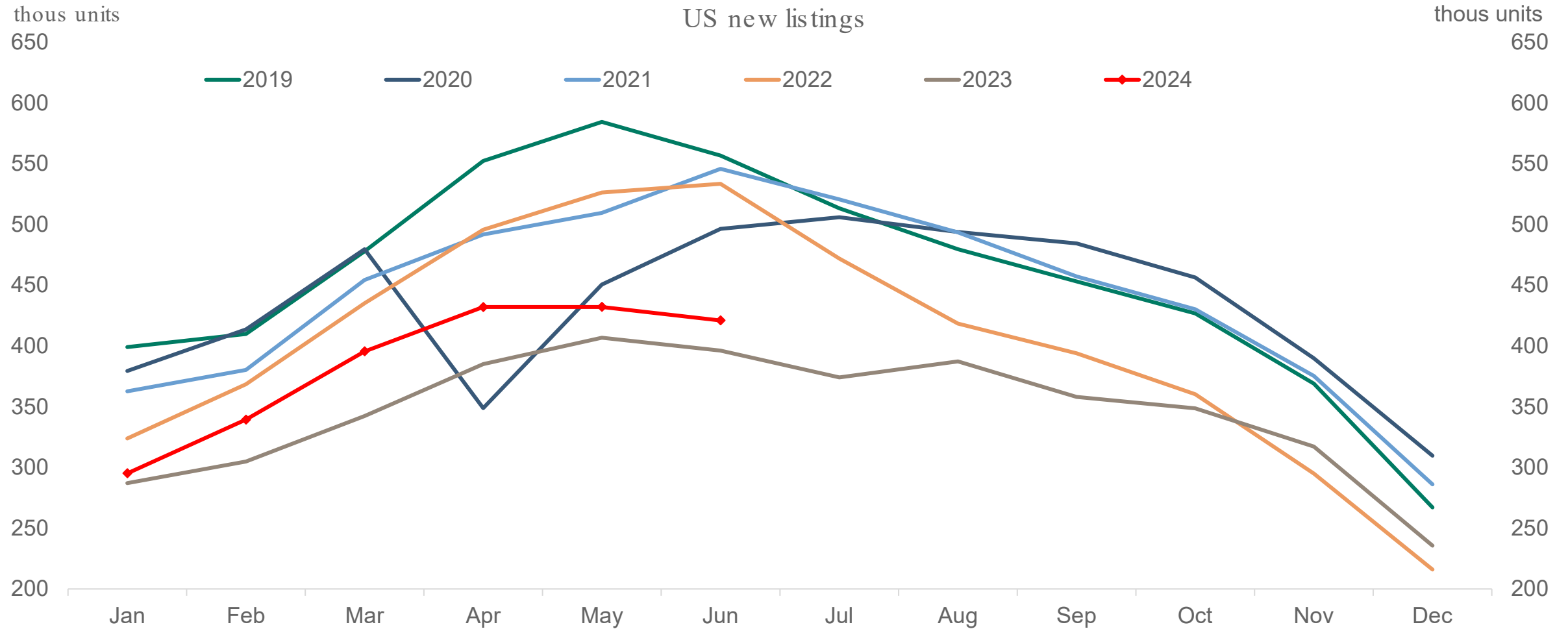


2) Housing Supply: Housing supply is low,  
construction coming down from record-high levels

# Homeowner and rental vacancy rates at very low levels



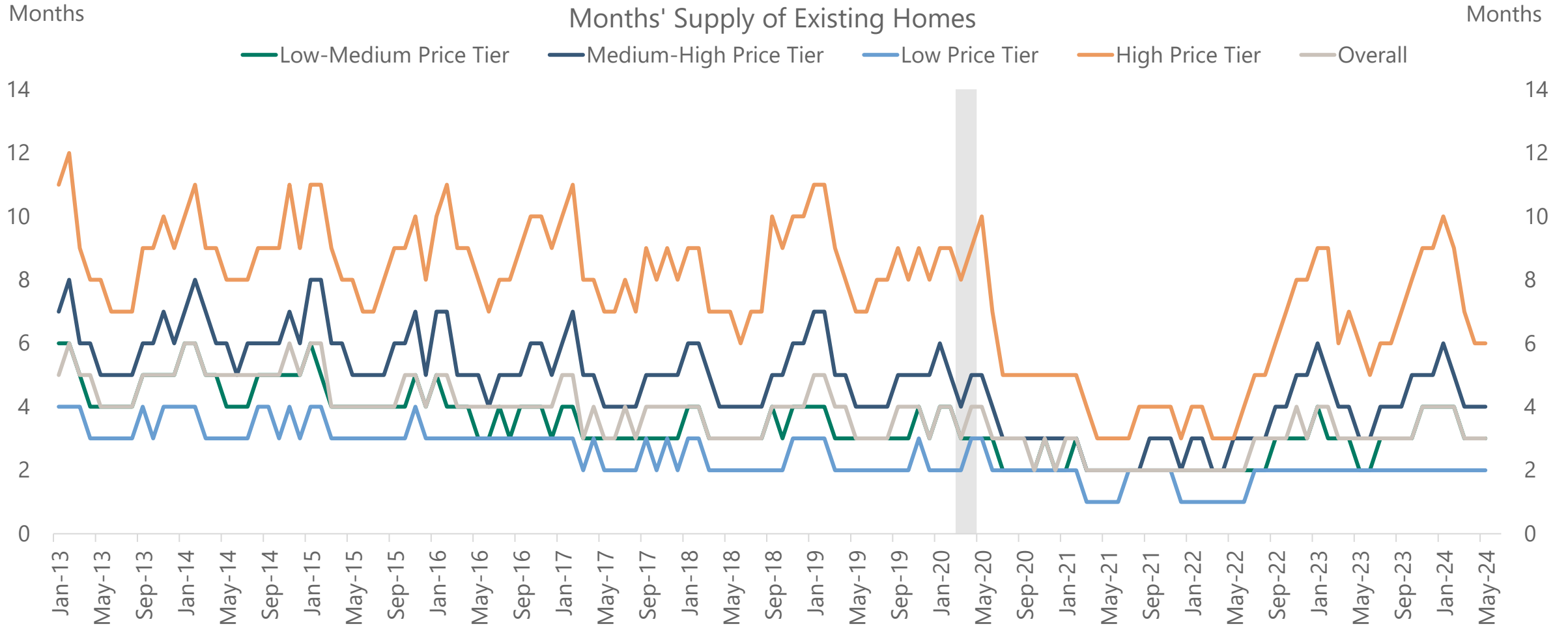
# Newly listed homes much lower than normal



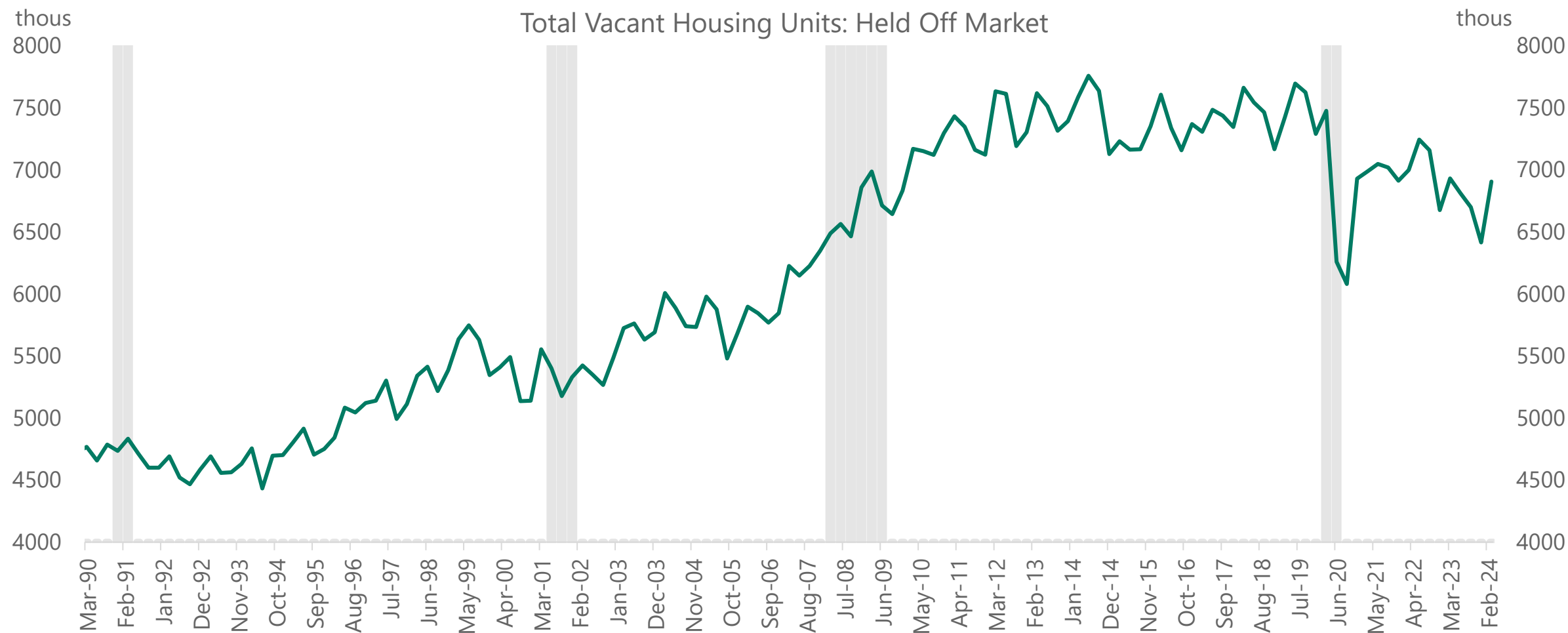
# Housing supply is low: Residential new listings remains low



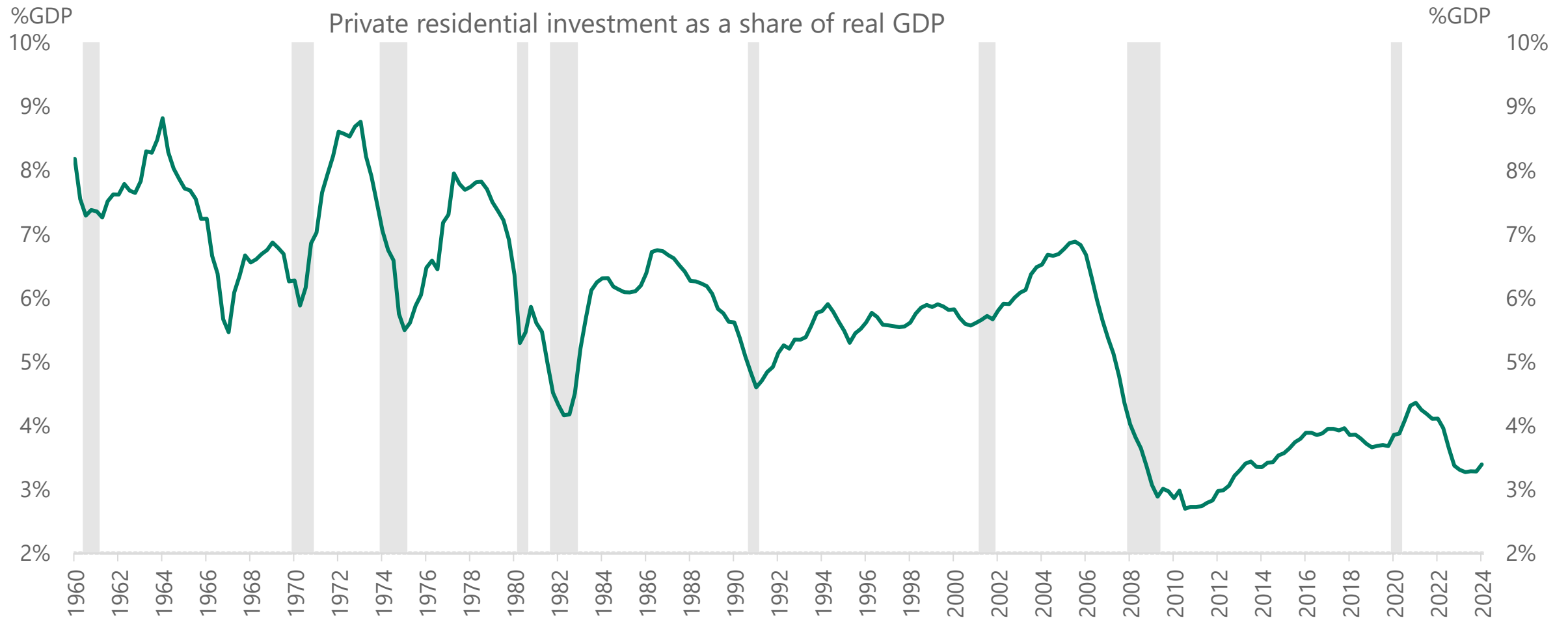
# Inventory of existing homes for sale remains low across the price spectrum



# Vacant housing units held off market



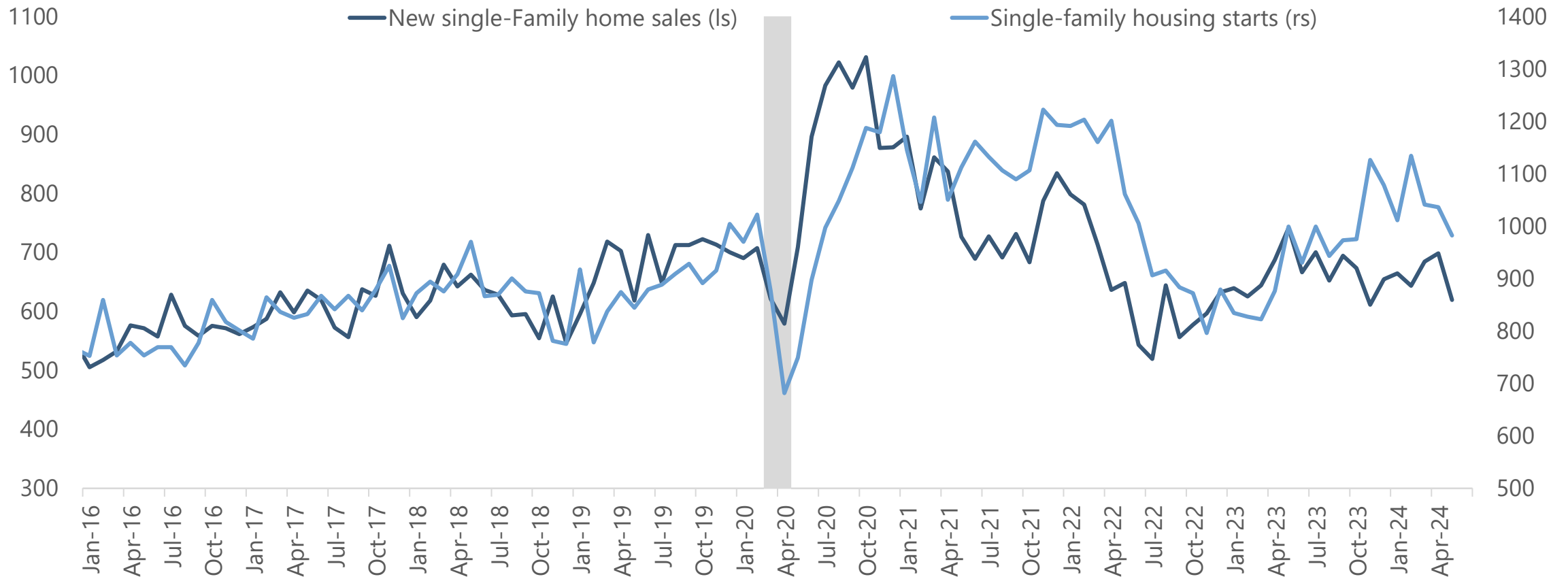
# Residential investment as a share of real GDP is very low



# Housing starts and new home sales declining recently

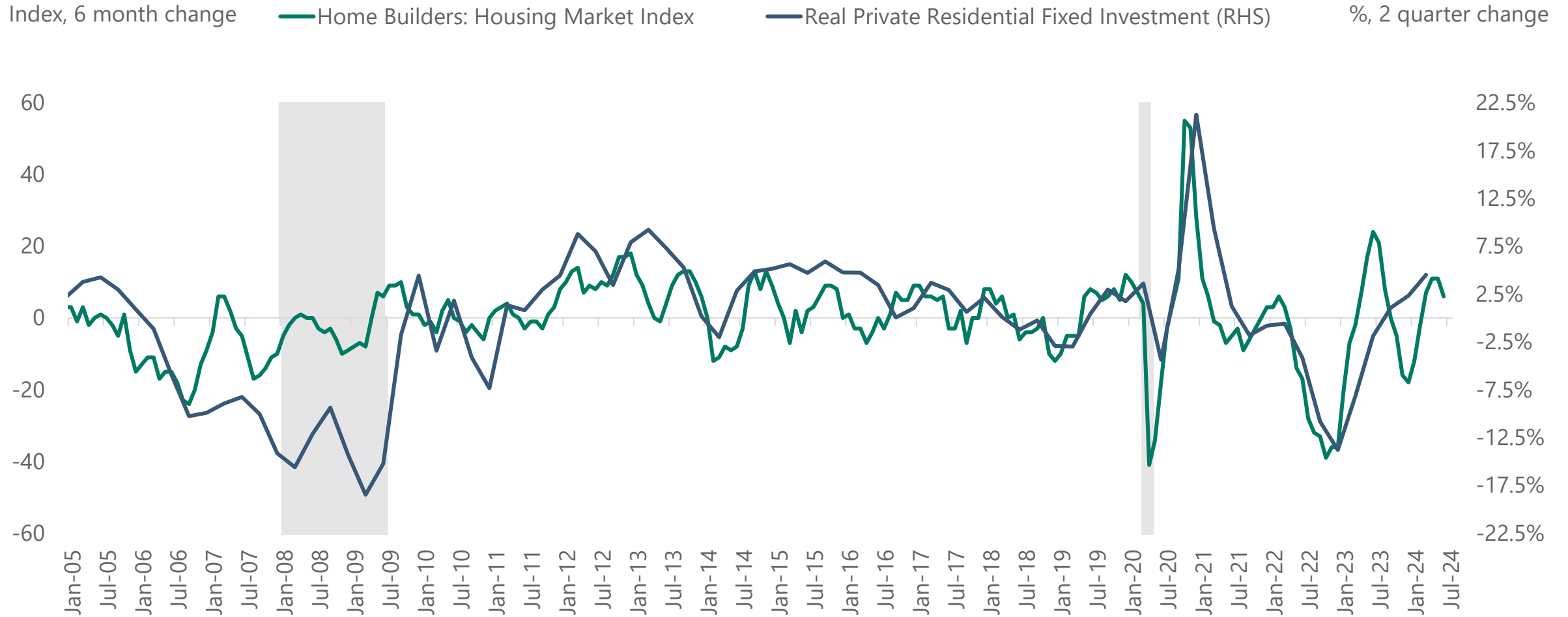
SAAR, Thous.

SAAR, Thous.

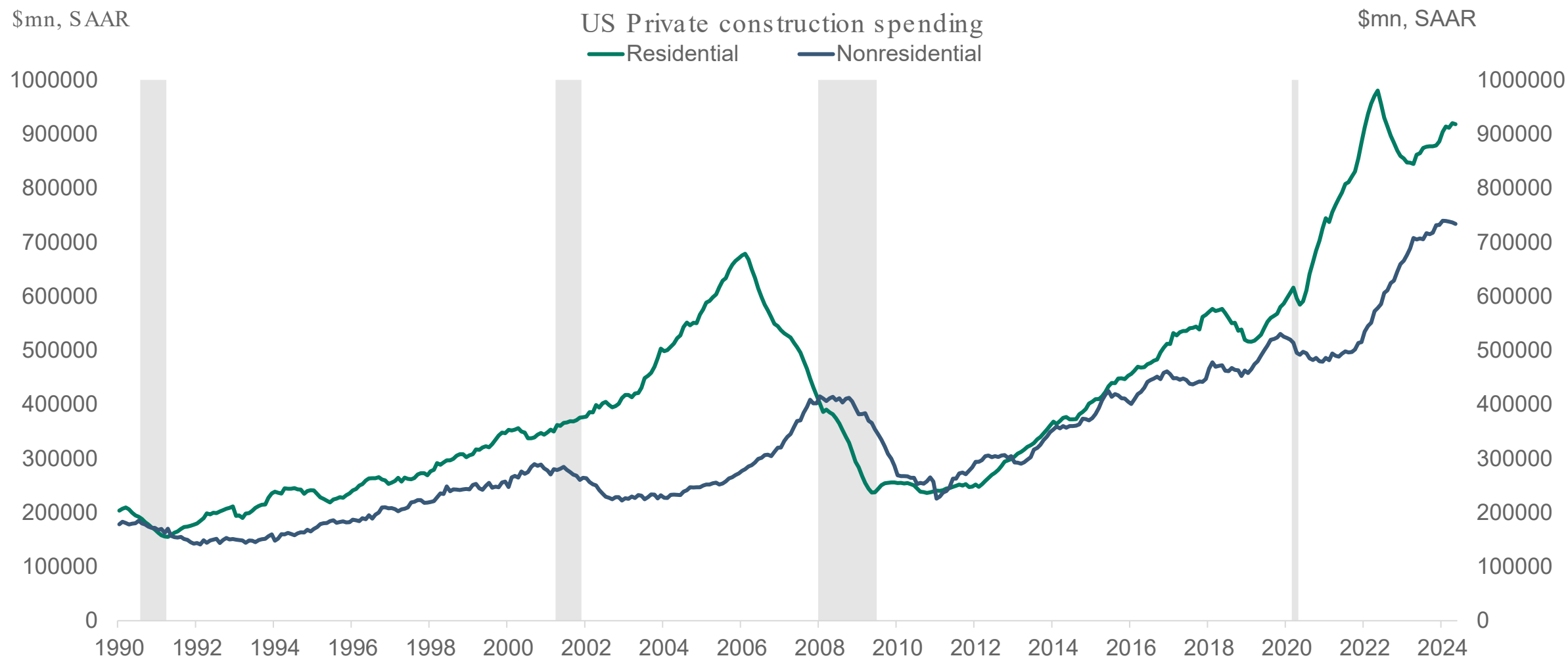




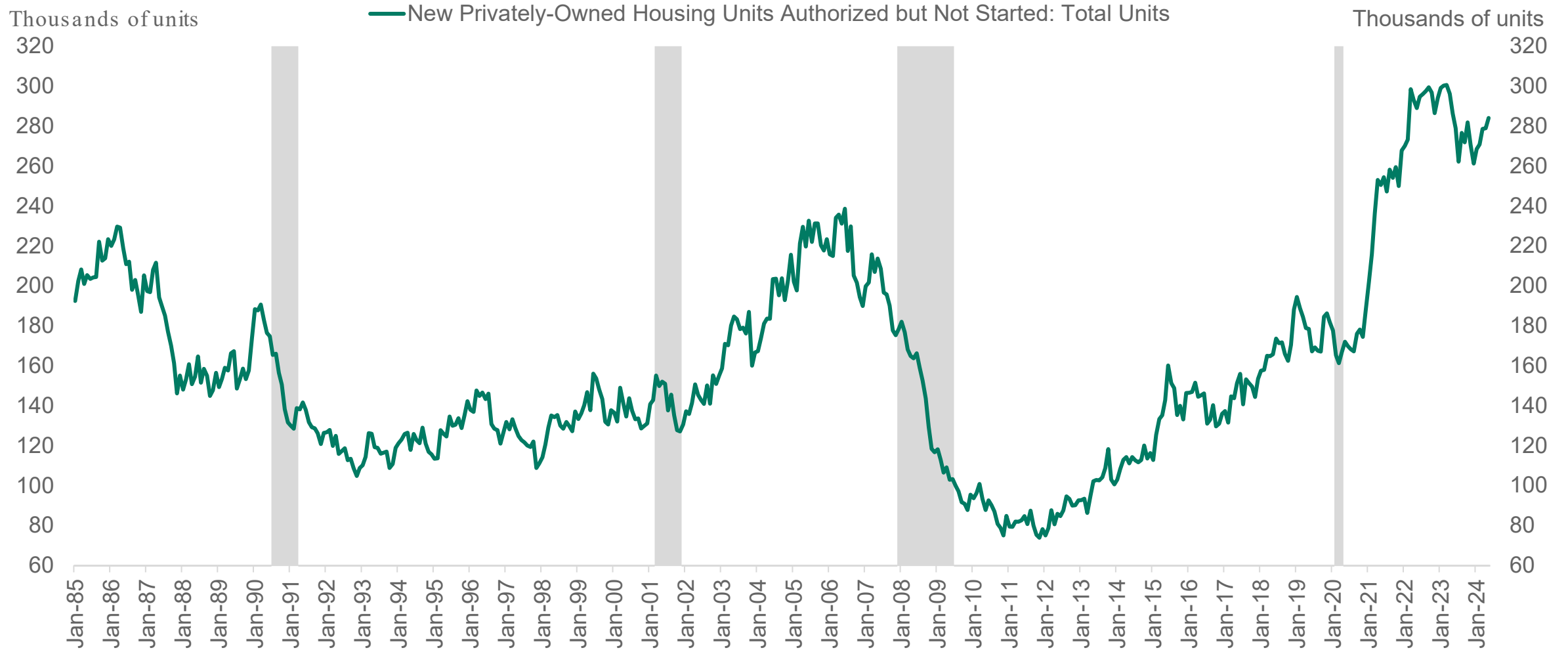
# Homebuilder confidence correlated with residential investment



# Residential construction spending starting to rise again



# New housing units authorized but not started

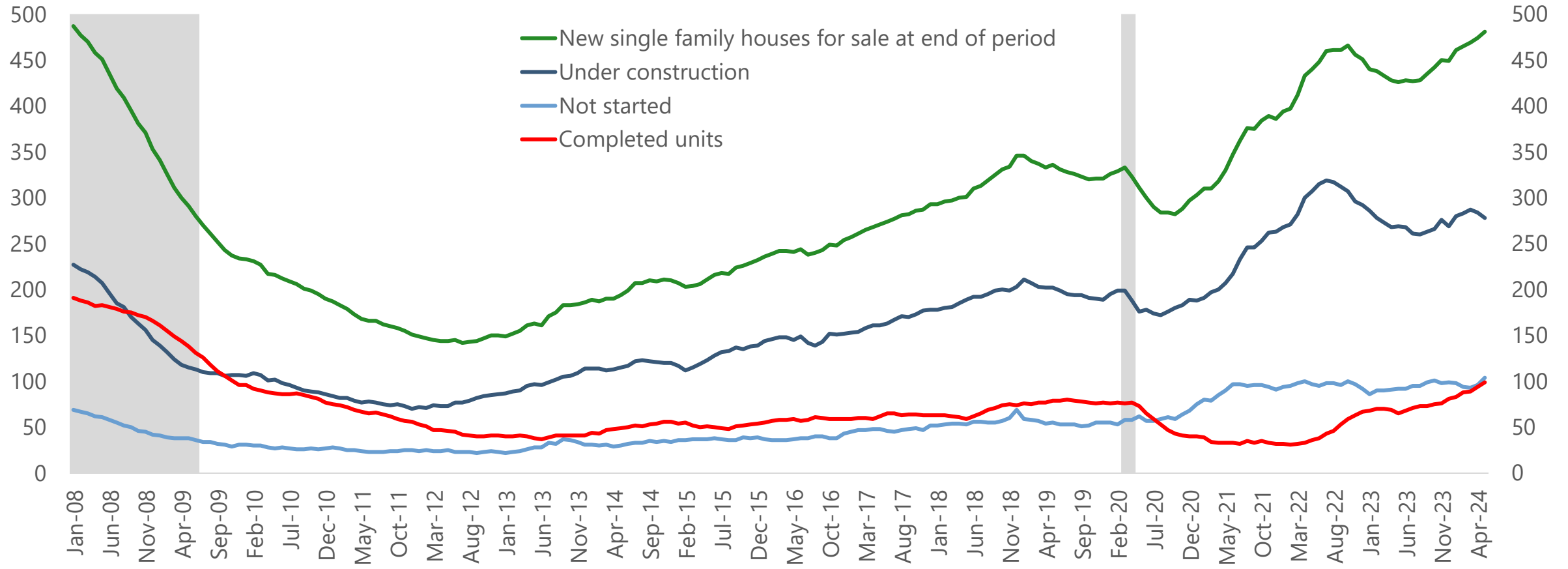


# Number of new houses for sale

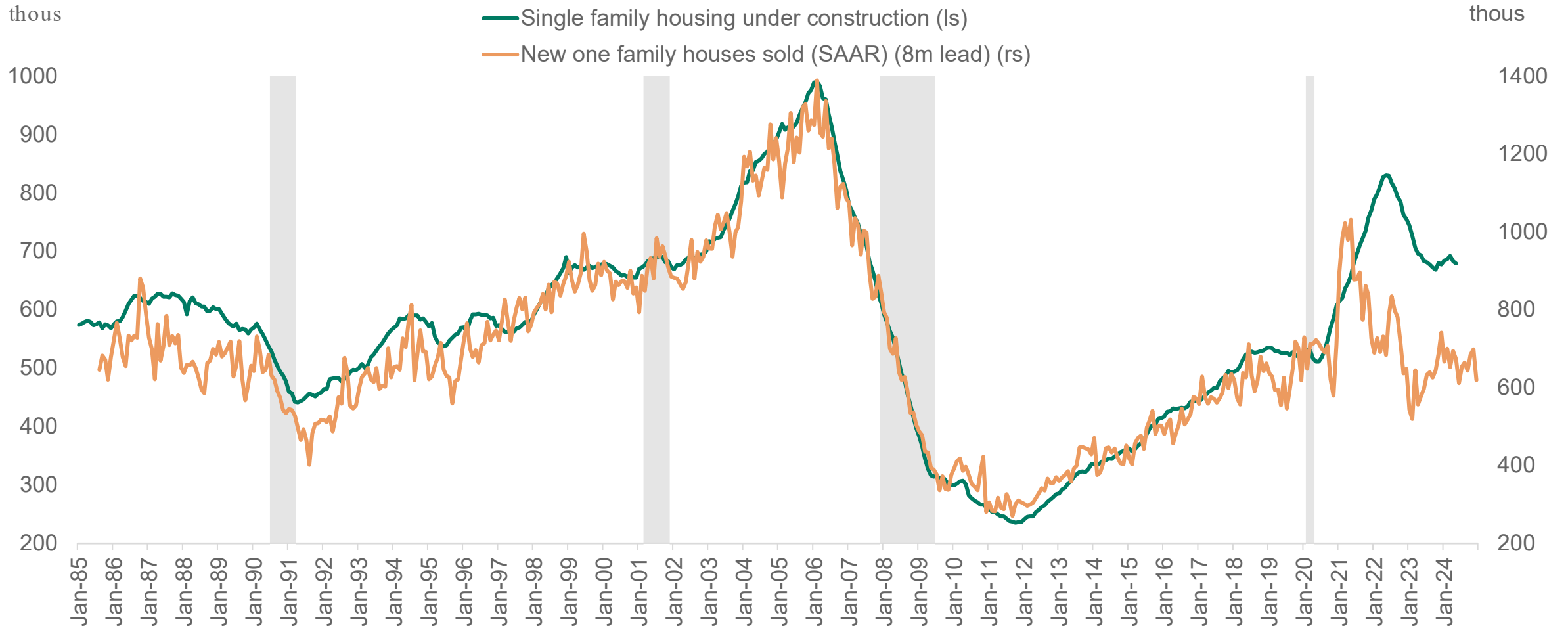
Thousands of units

Number of new houses for sale

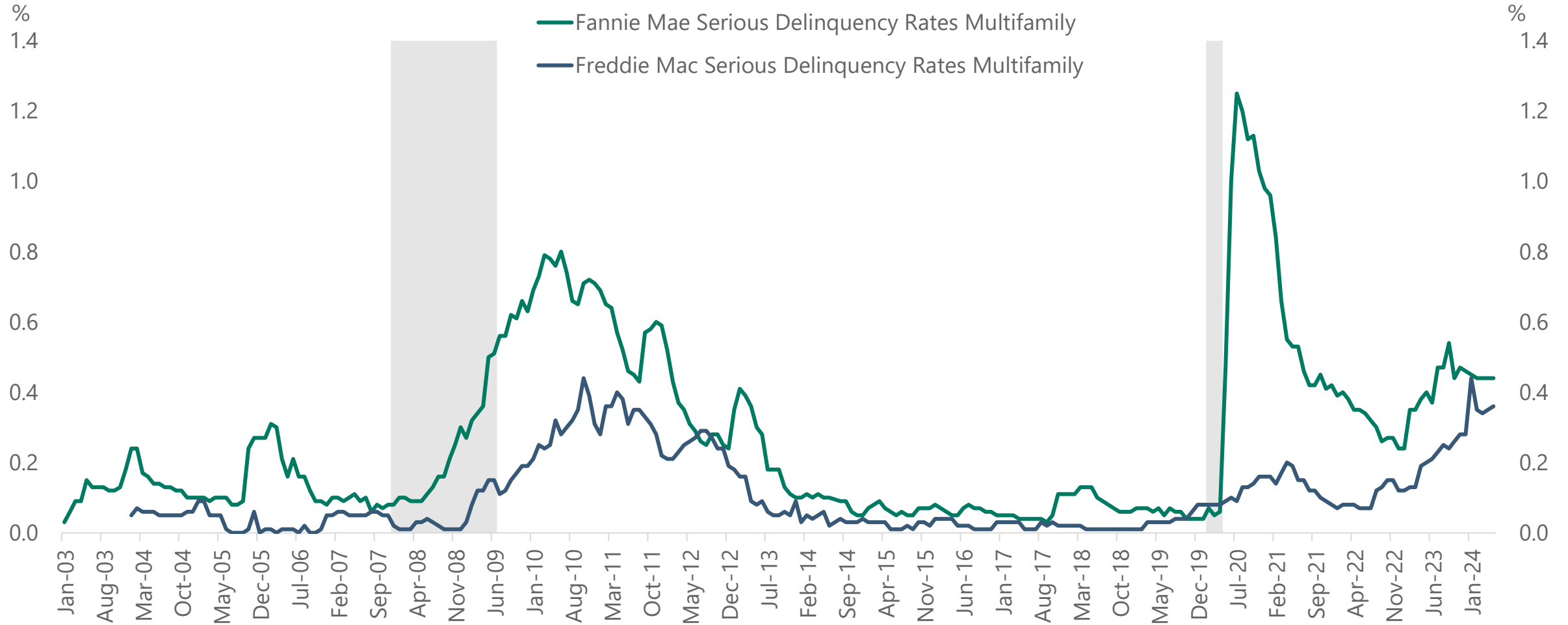
Thousands of units



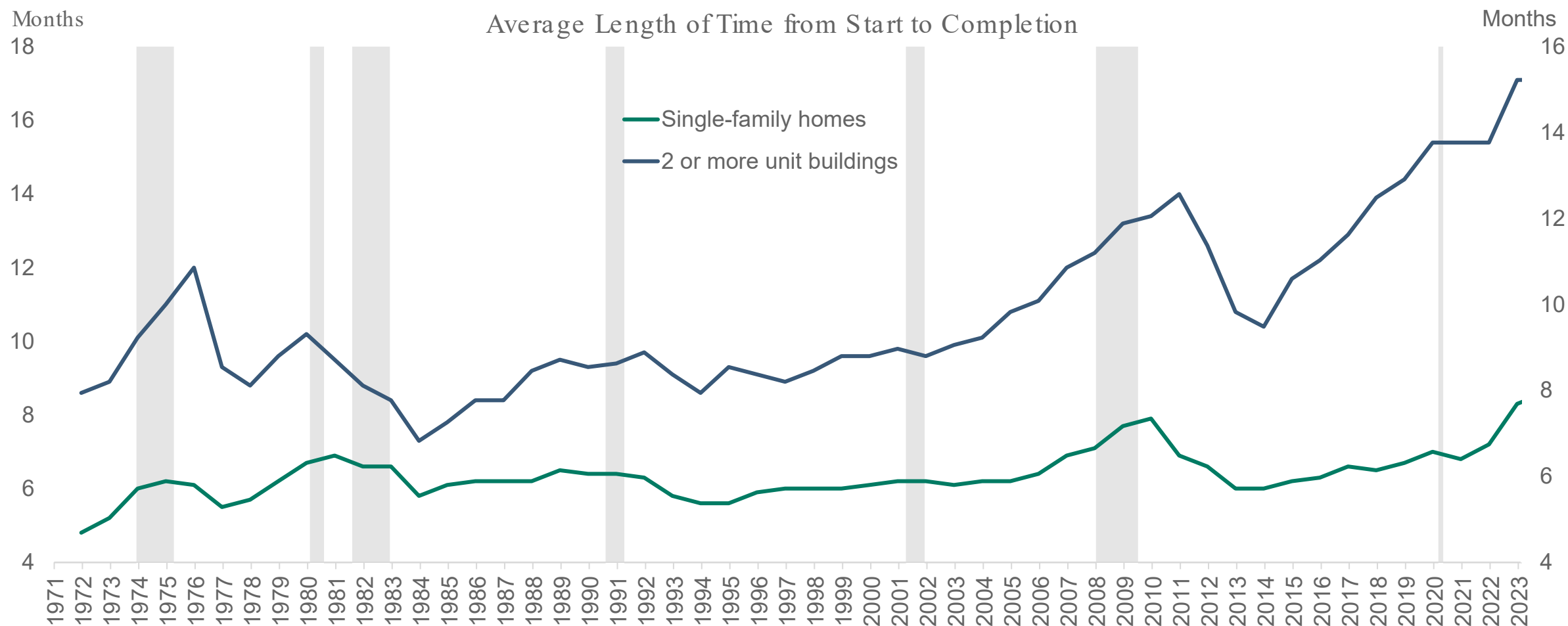
# Some disconnect between housing under construction and new homes sold



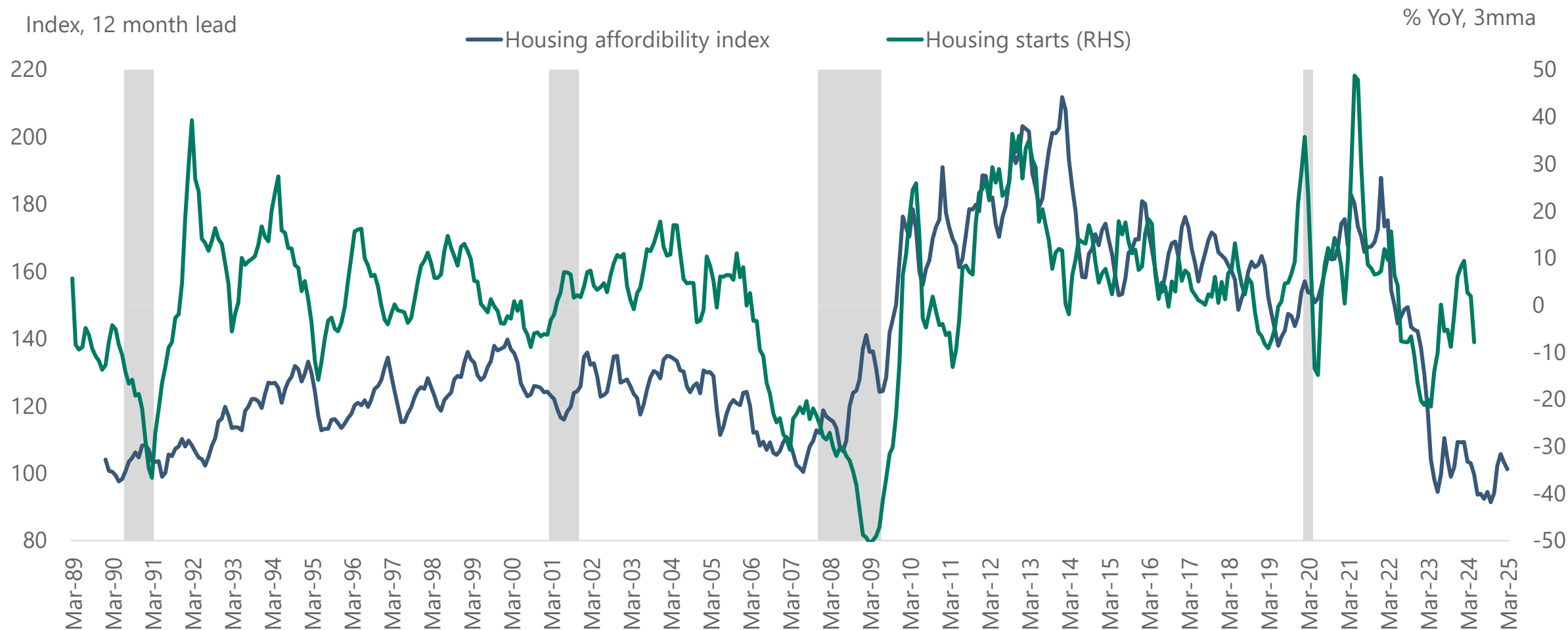
# Multifamily delinquencies rising



# It currently takes 8 months on average to build a single-family house

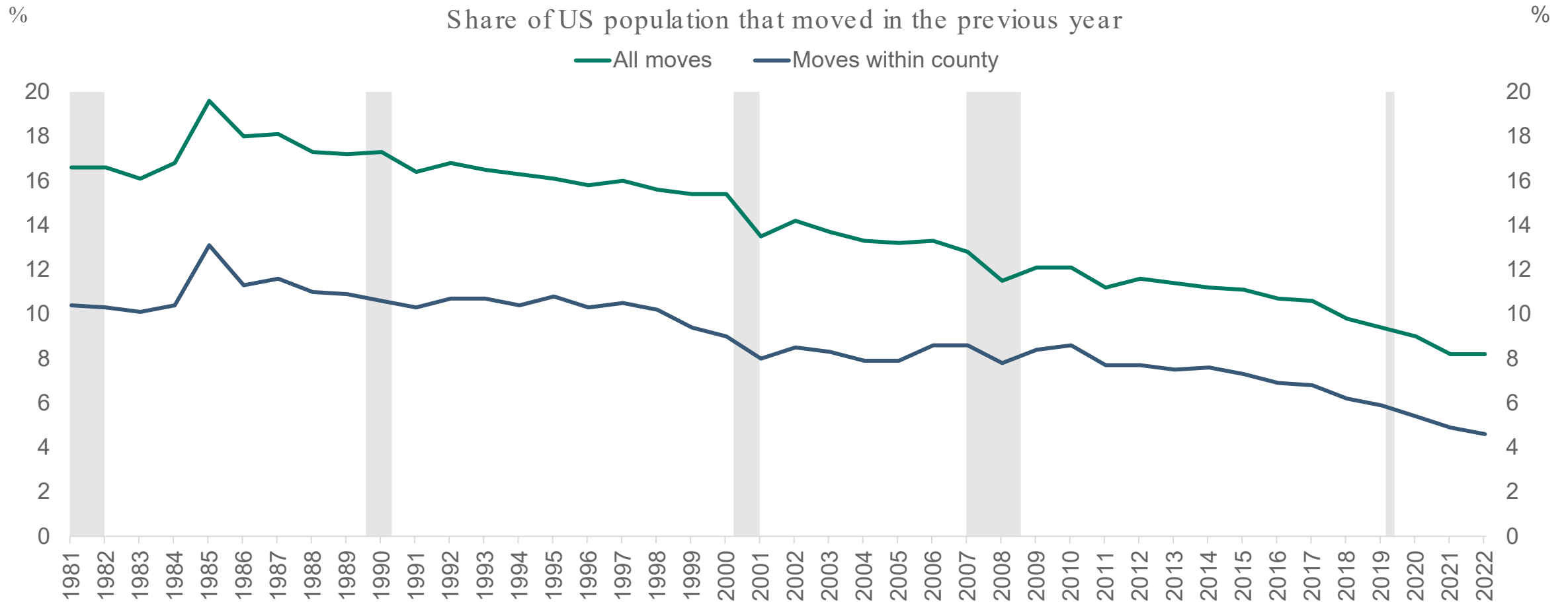


# Weak affordability points to coming slowdown in housing starts

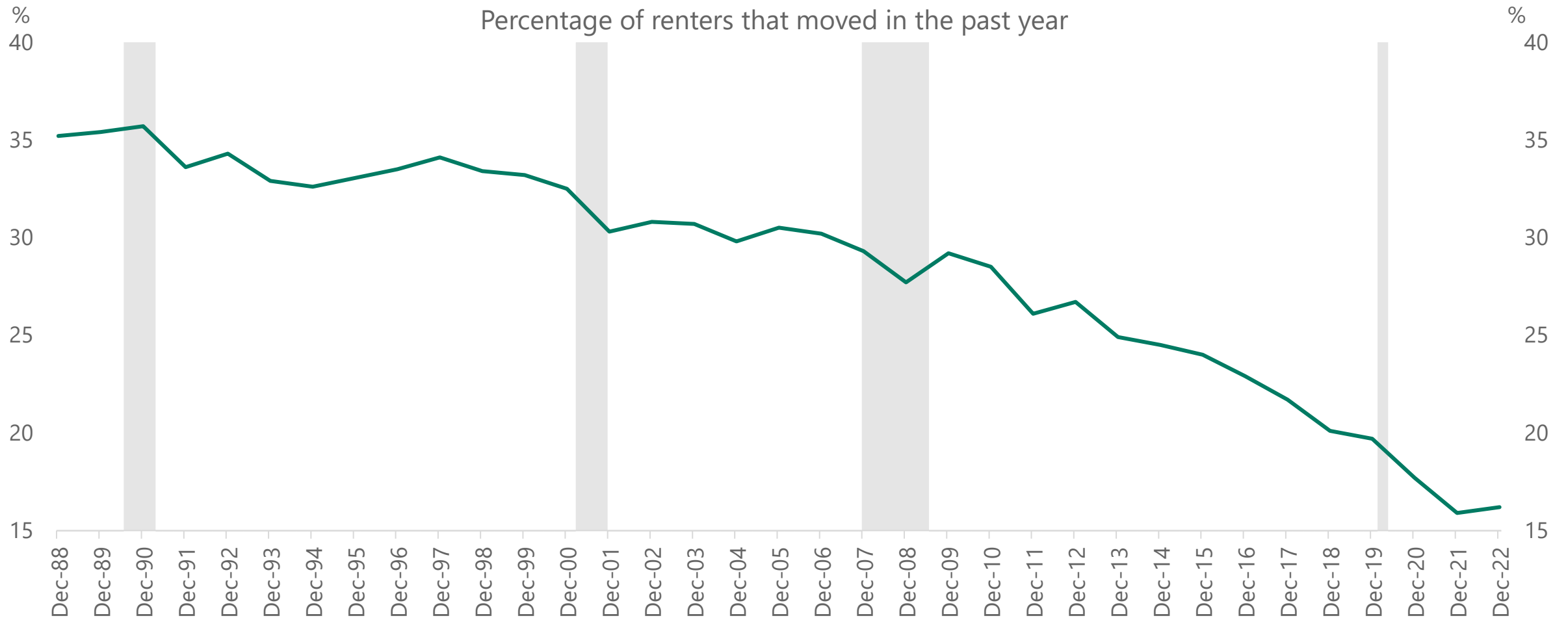




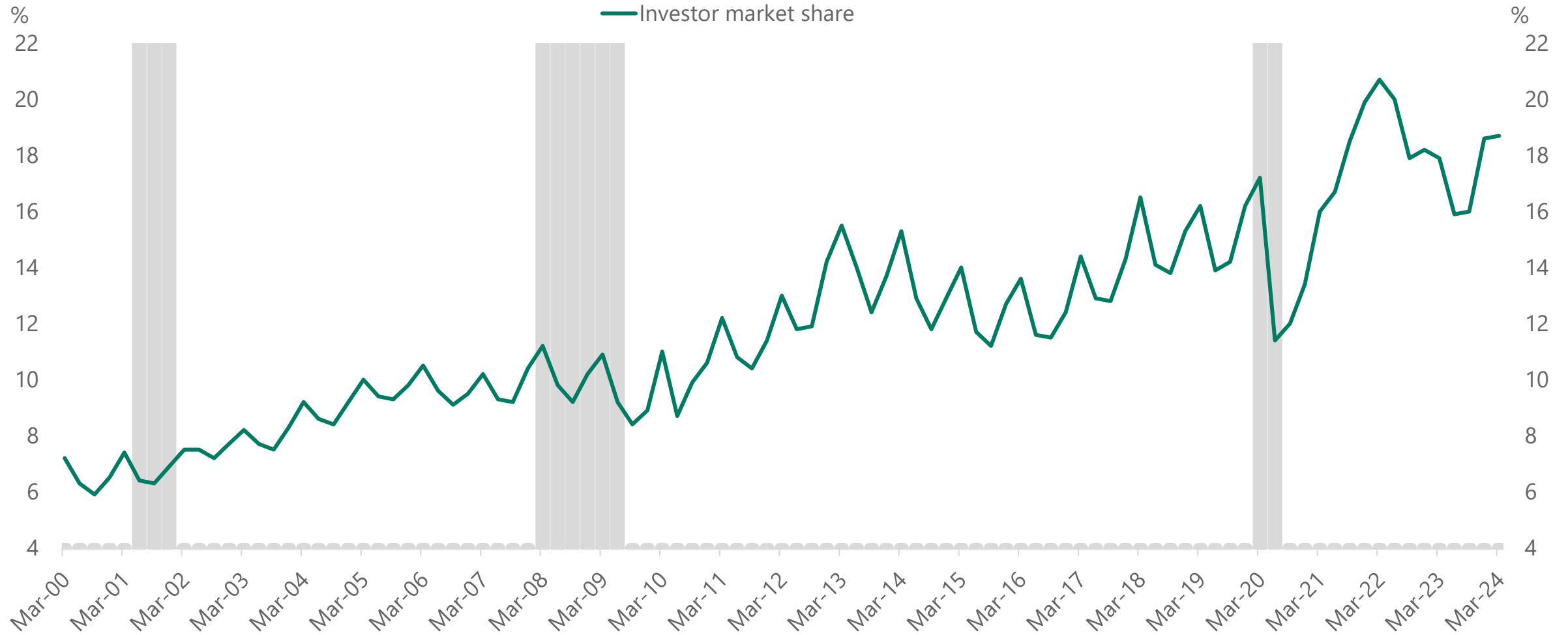
# Structural decline in the share of the US population moving to a new address



# Trend decline in the percentage of renters moving to new apartments or houses



# The investor share of home purchases is rising

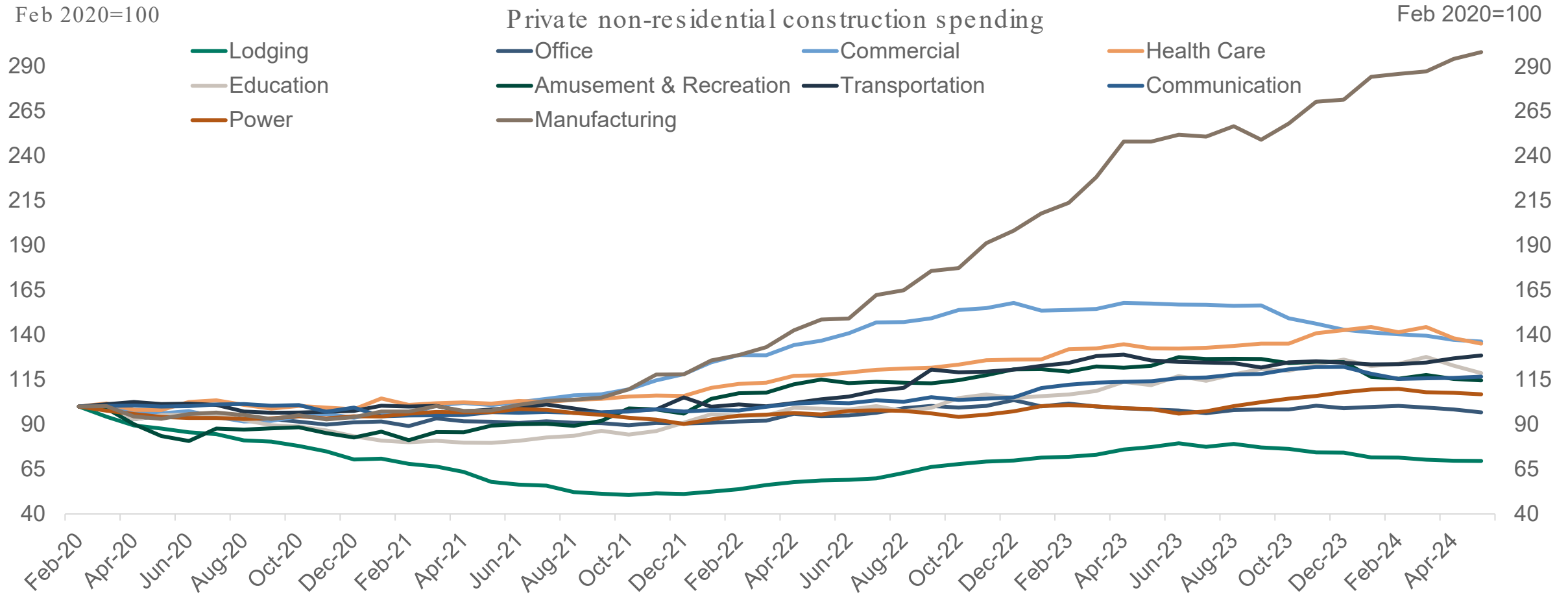


# Steady growth in employment in residential construction



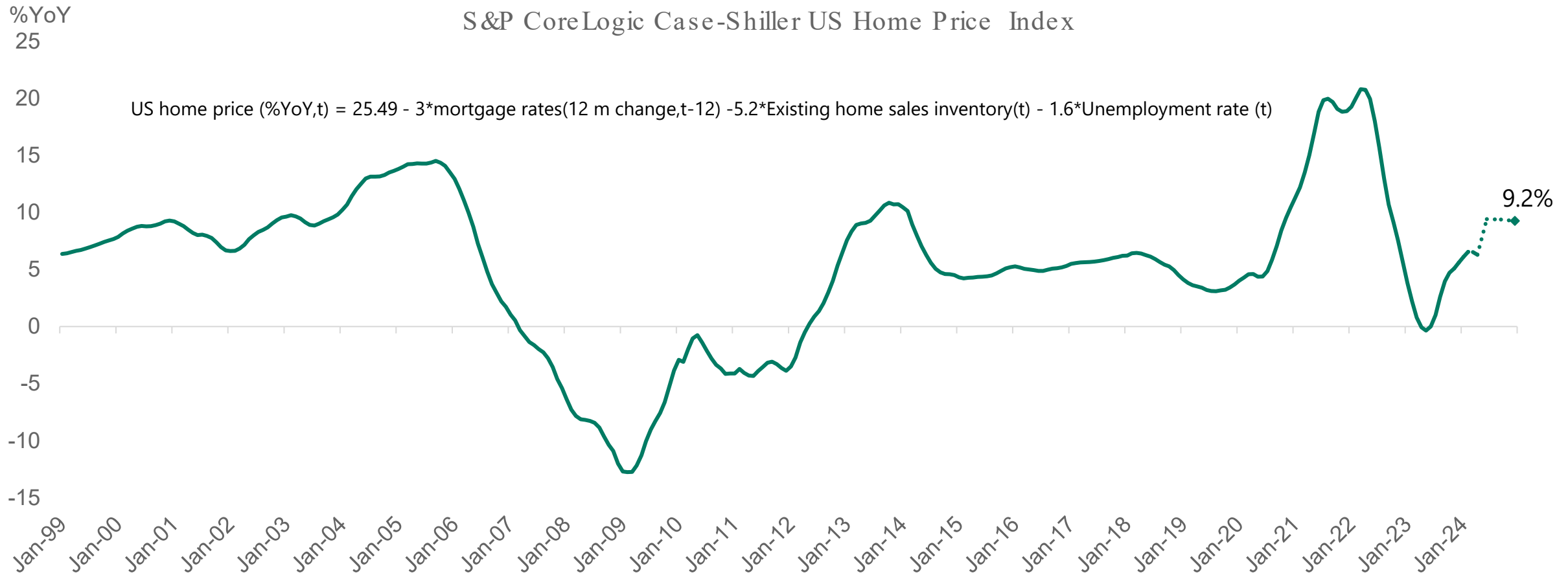
Source: BLS, Haver Analytics, Apollo Chief Economist

# The biggest increase in non-residential construction has been in manufacturing

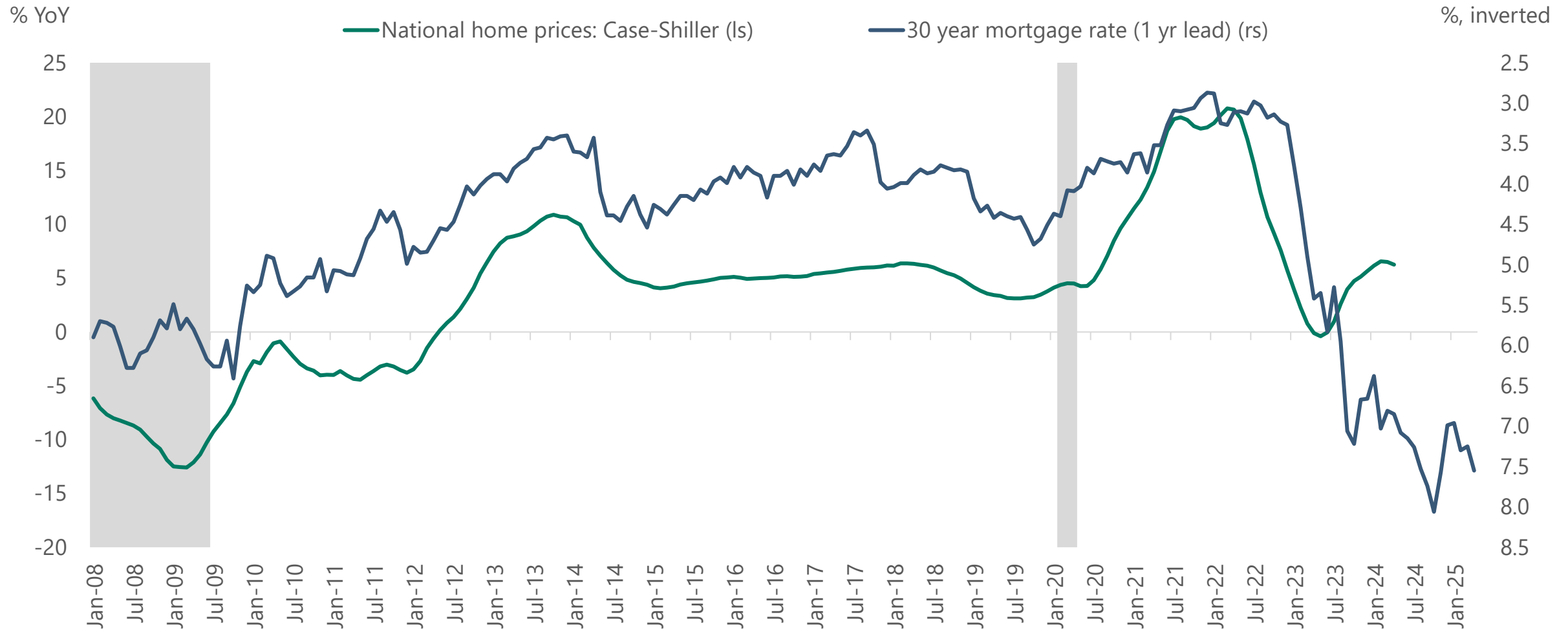


3) House Prices: Home price inflation not yet impacted by higher mortgage rates

US house price model: Declining mortgage rates pushing home prices higher.  
Low inventory pushing home prices higher.

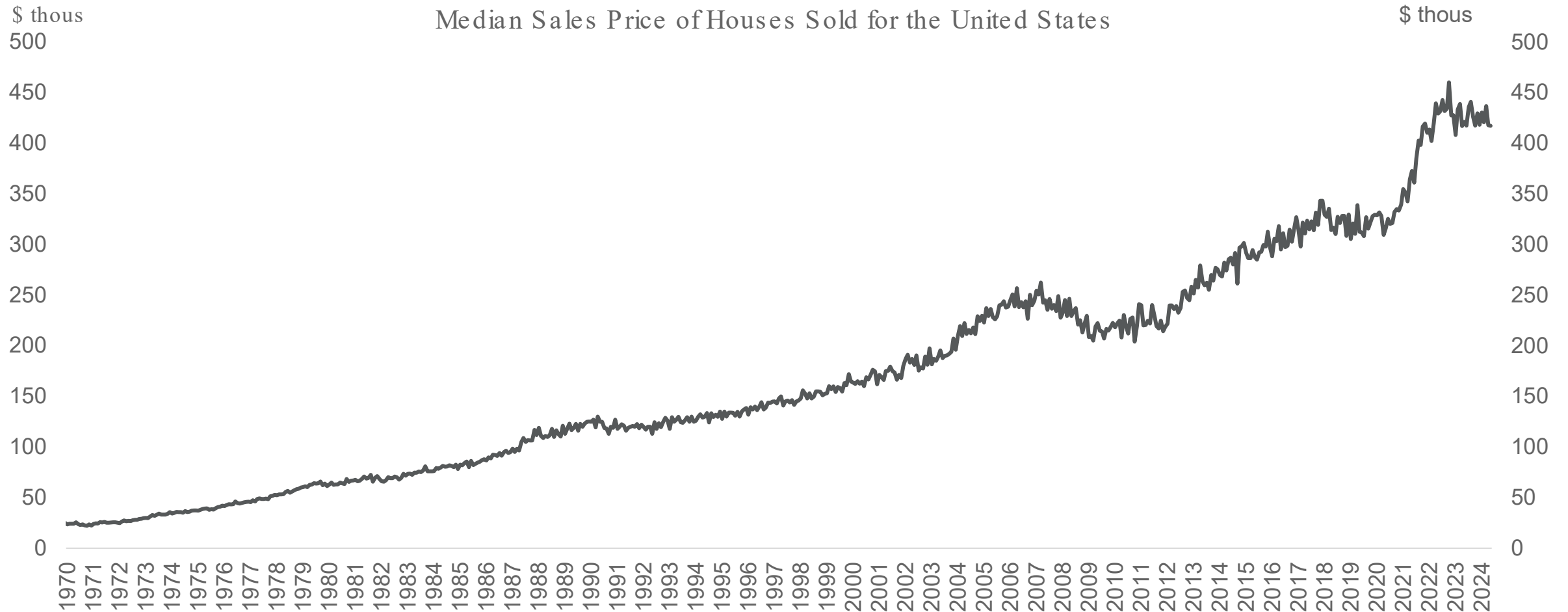


# Disconnect between mortgage rates and home prices because of low housing supply

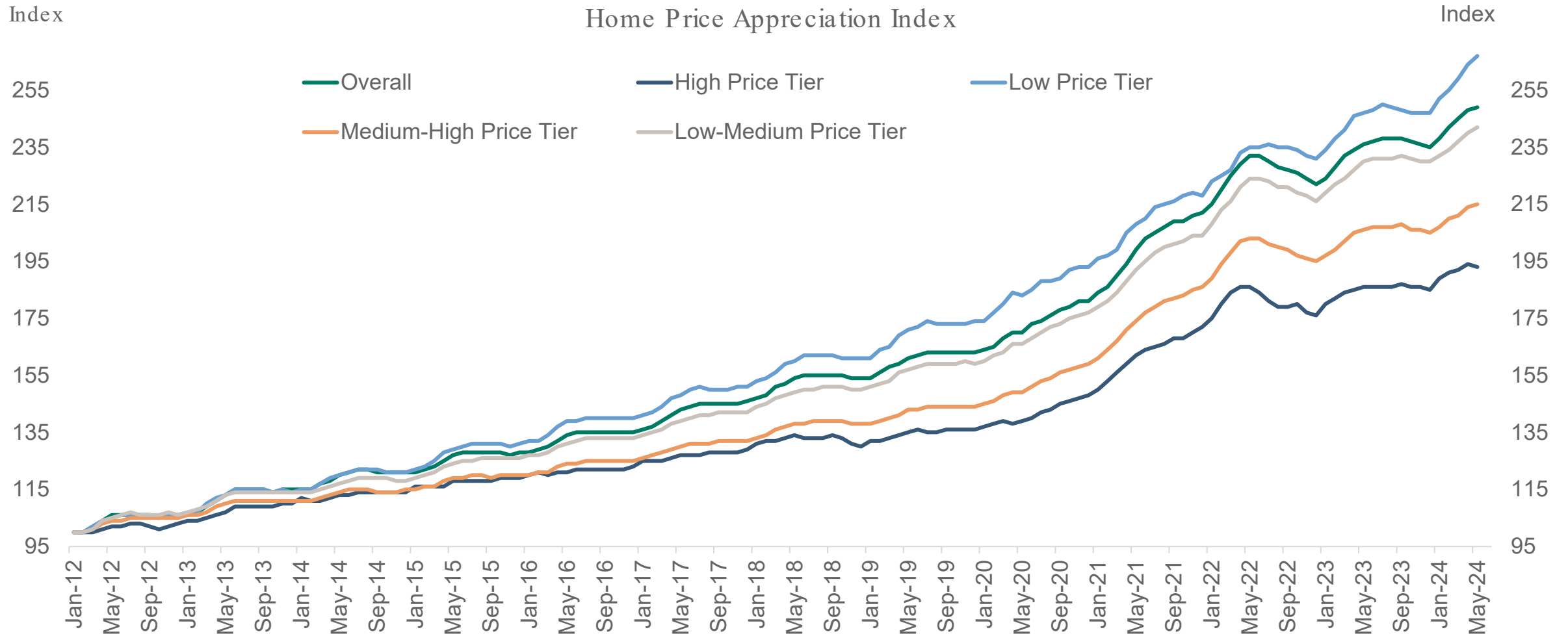




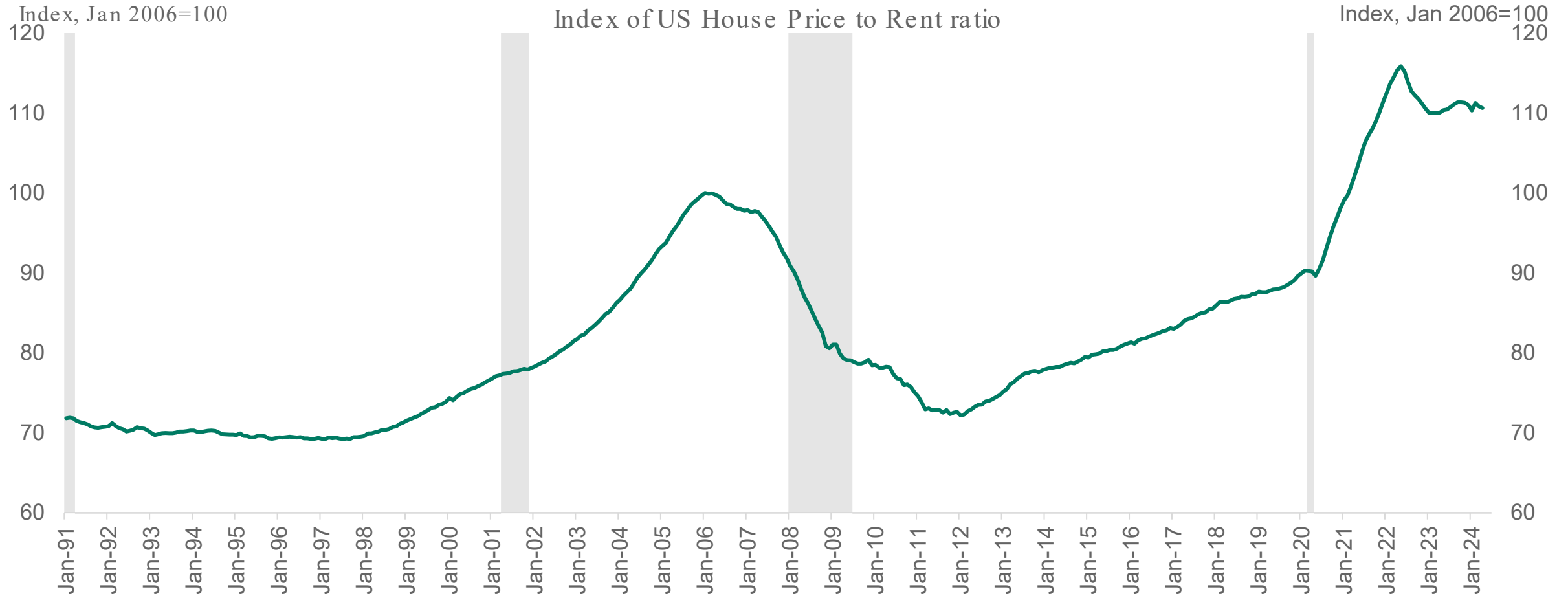
# Median home sales price now \$417.4K



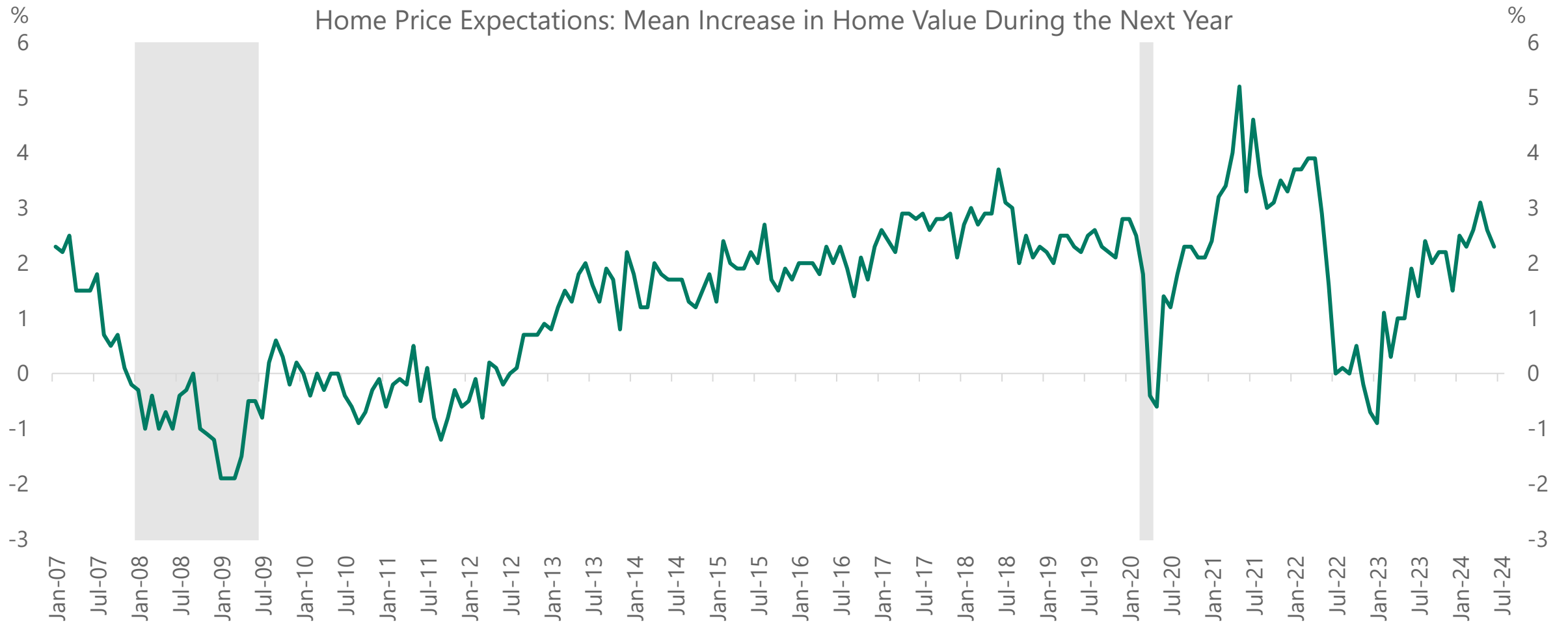
# House price inflation rising for low price tiers



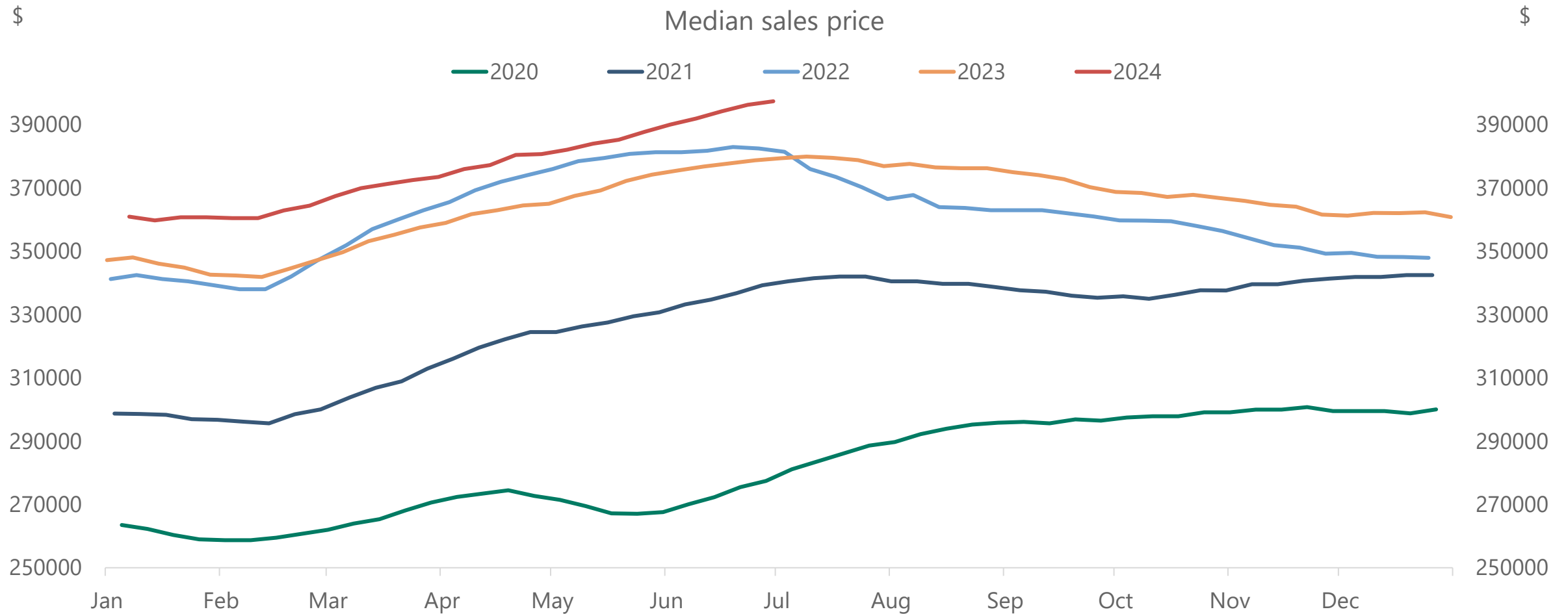
# Home price to rent ratio significantly above 2006 levels



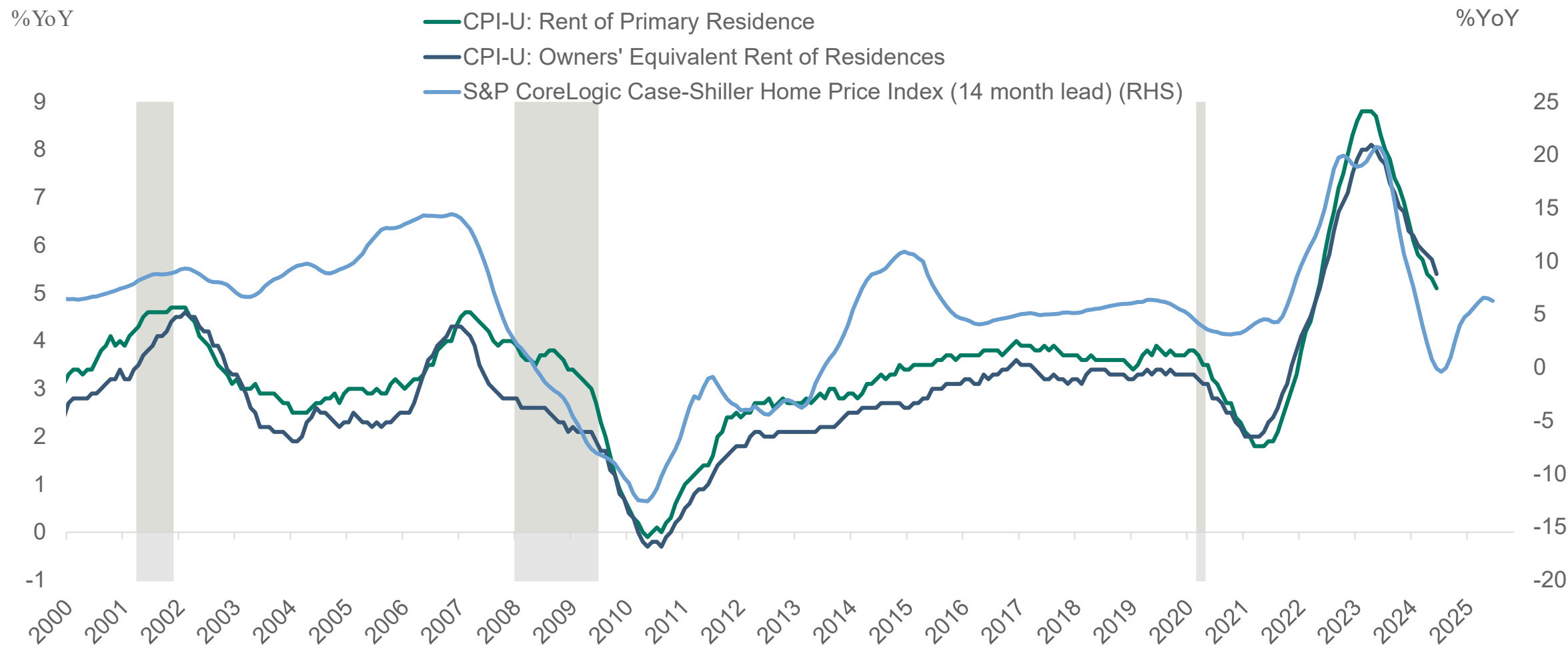
# Consumers' expectations of home price inflation



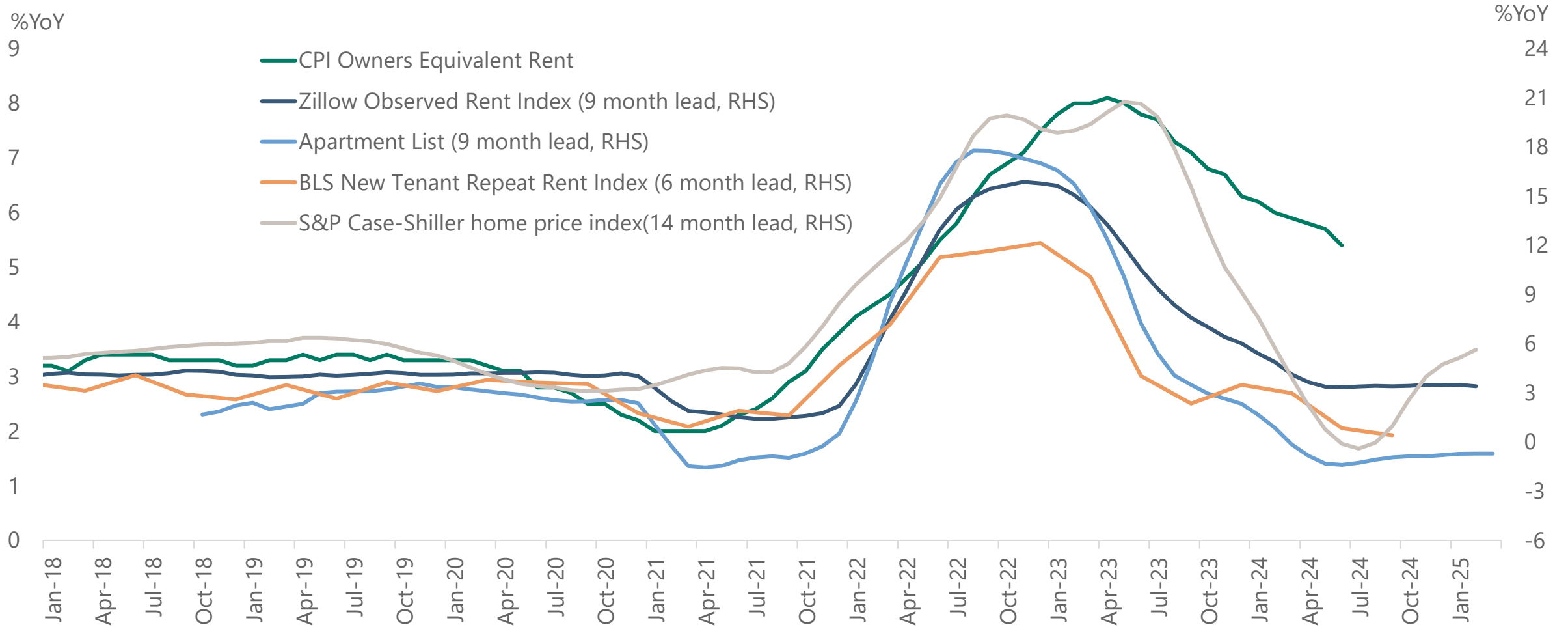
# Median sales price well above last year's levels



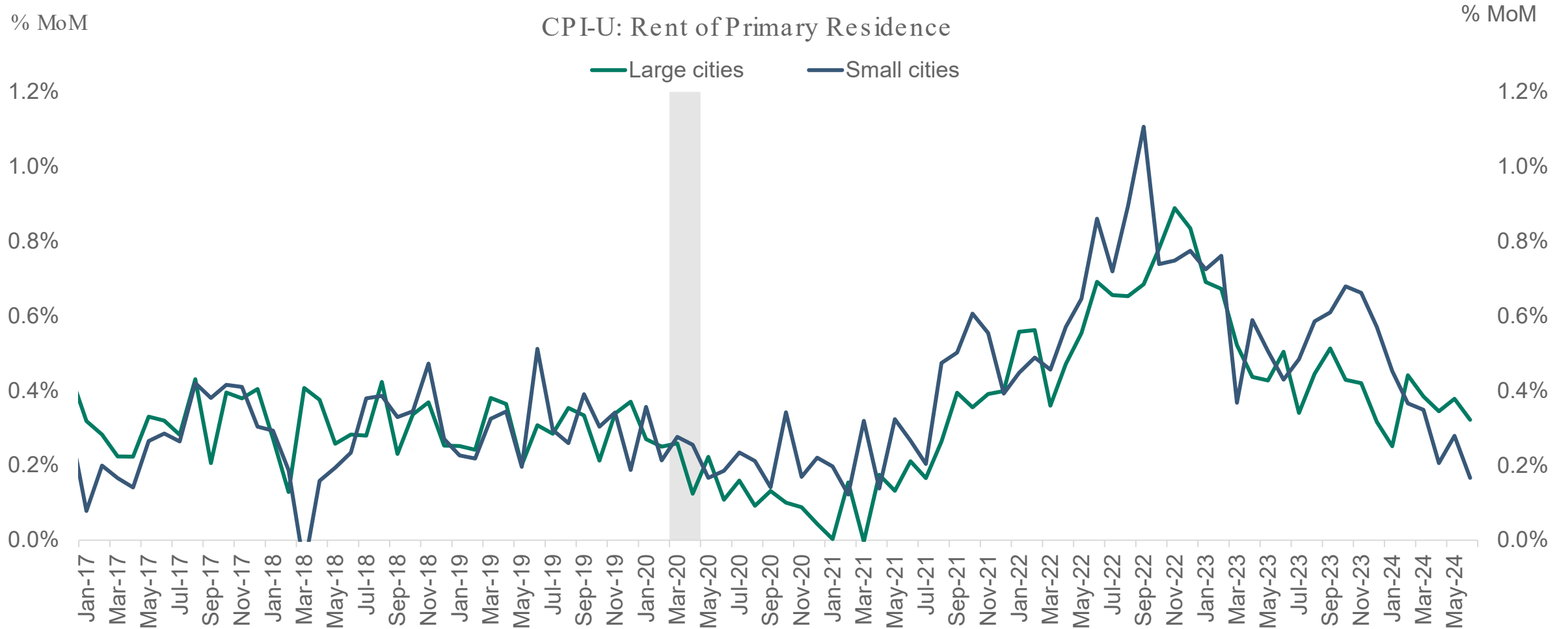
# Rising home price inflation points to higher CPI ahead



# Inflation in housing sector stabilizing

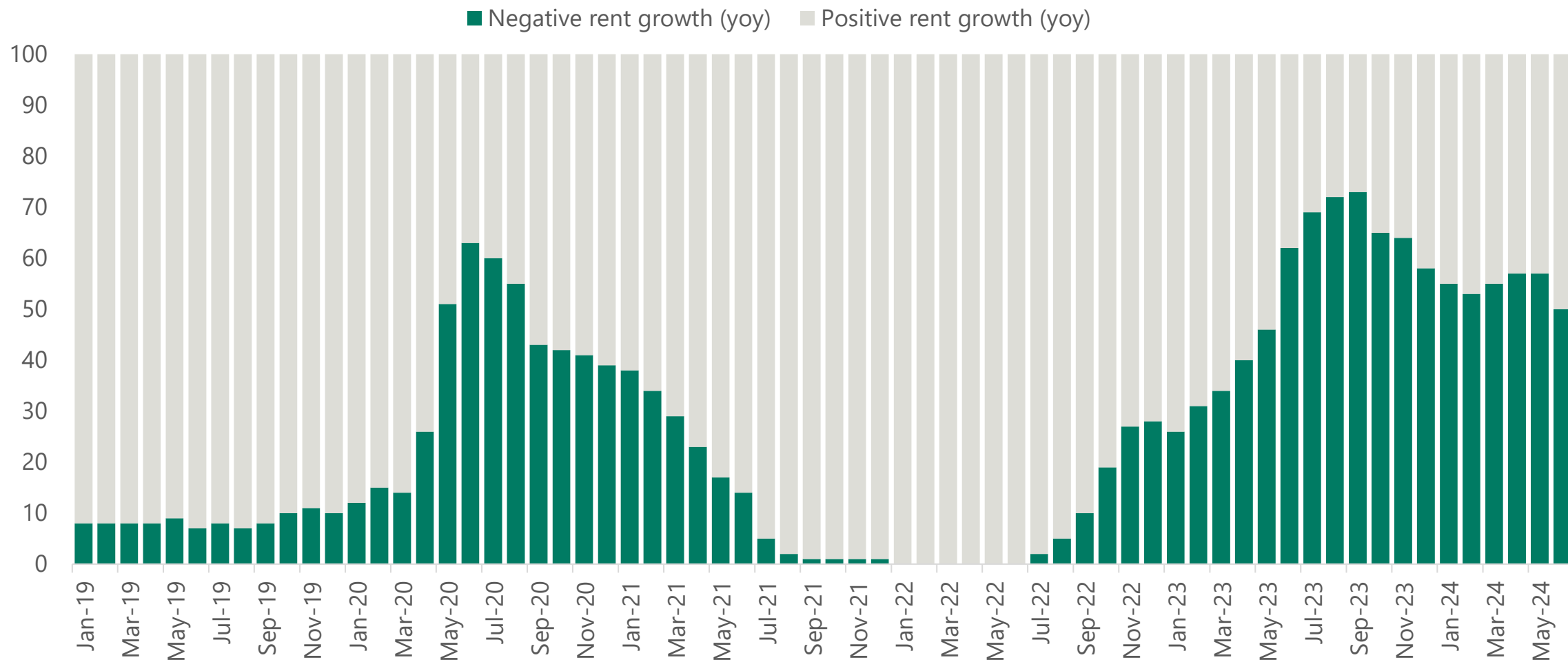


# Rent inflation trending lower in both small cities and large cities

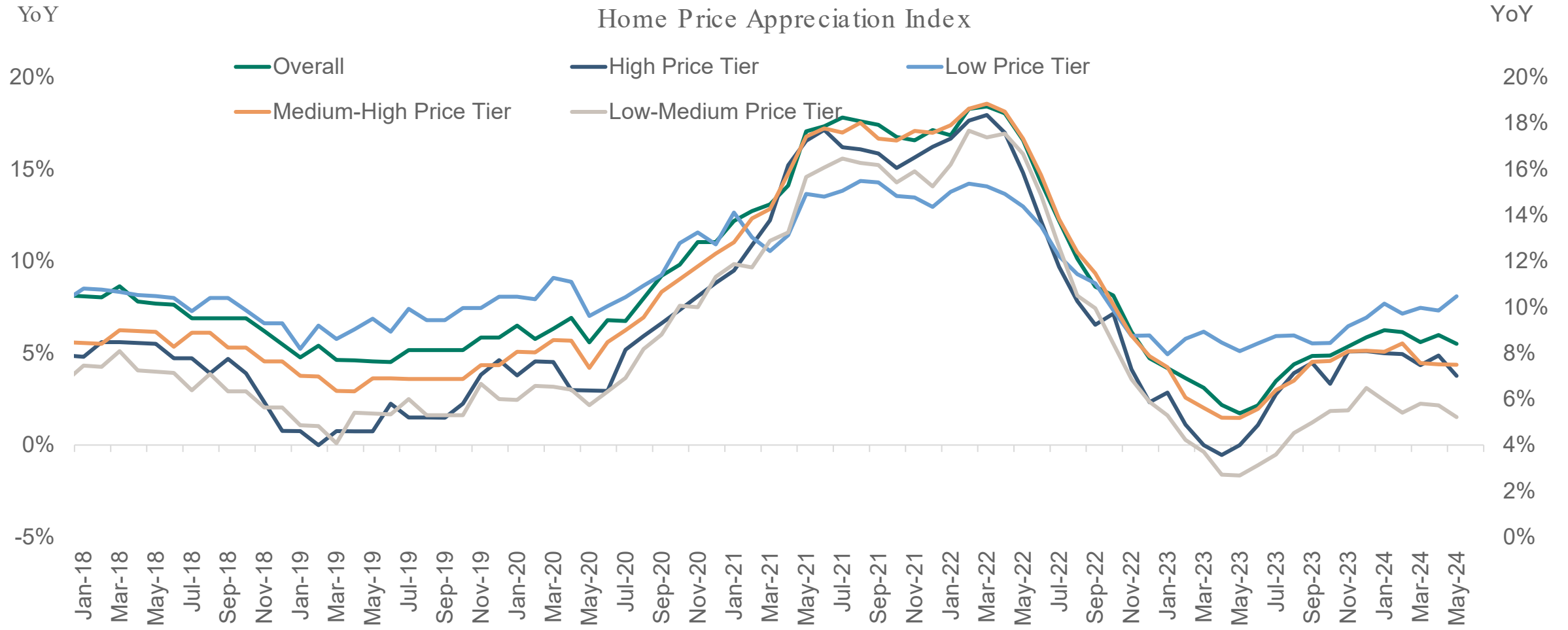




# 100 largest US cities: Share of cities with positive rent high

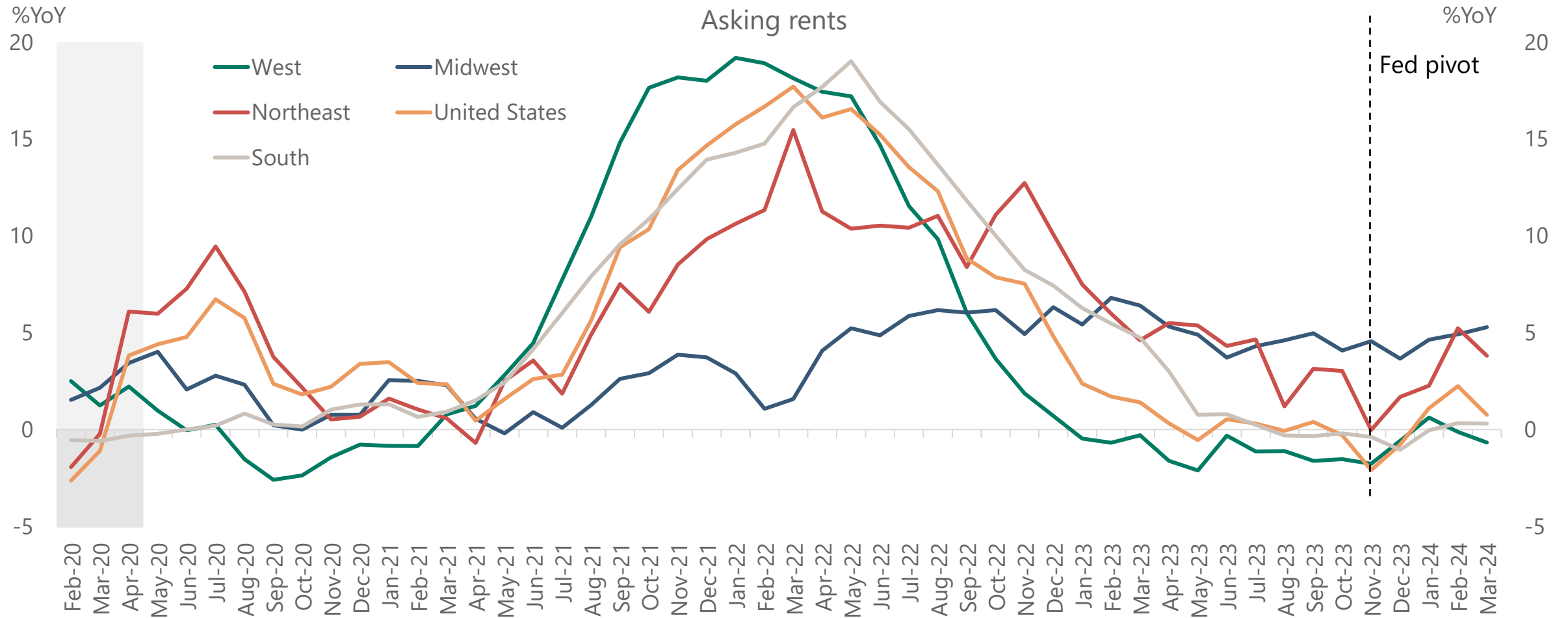


# Home price inflation solid because of low inventory of homes for sale

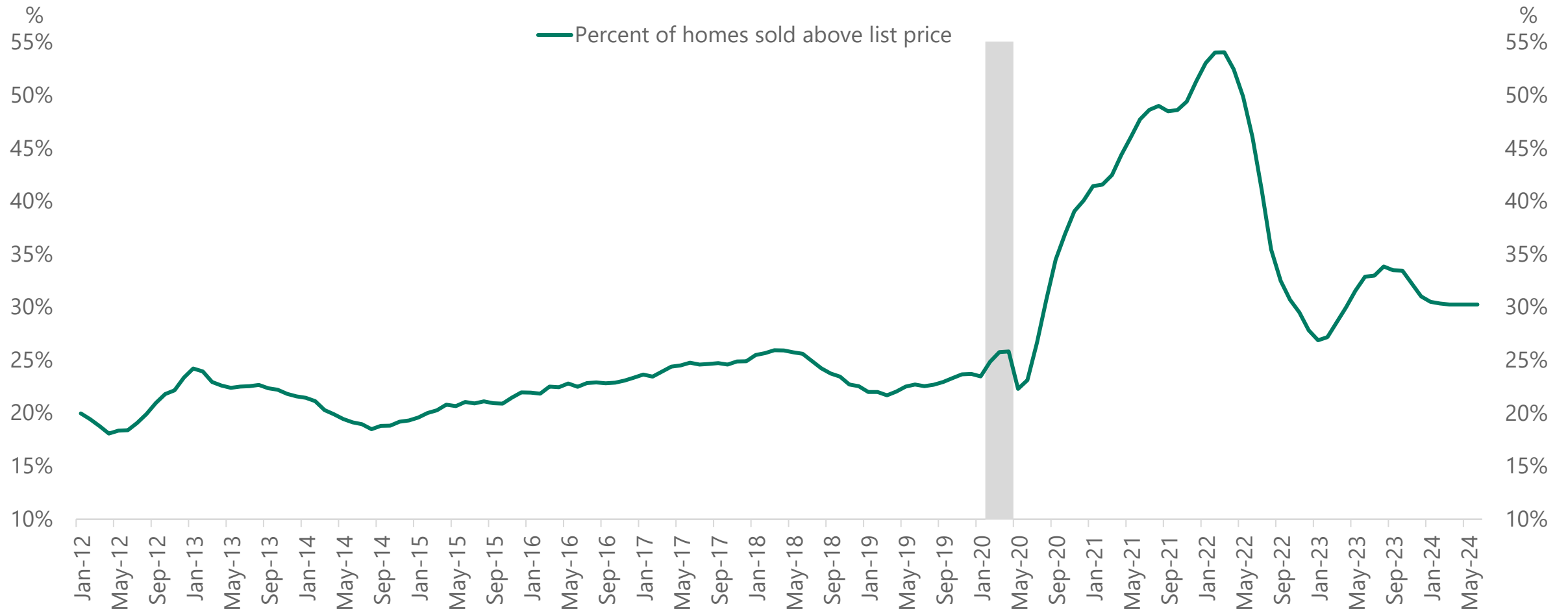




# Asking rents rising across regions

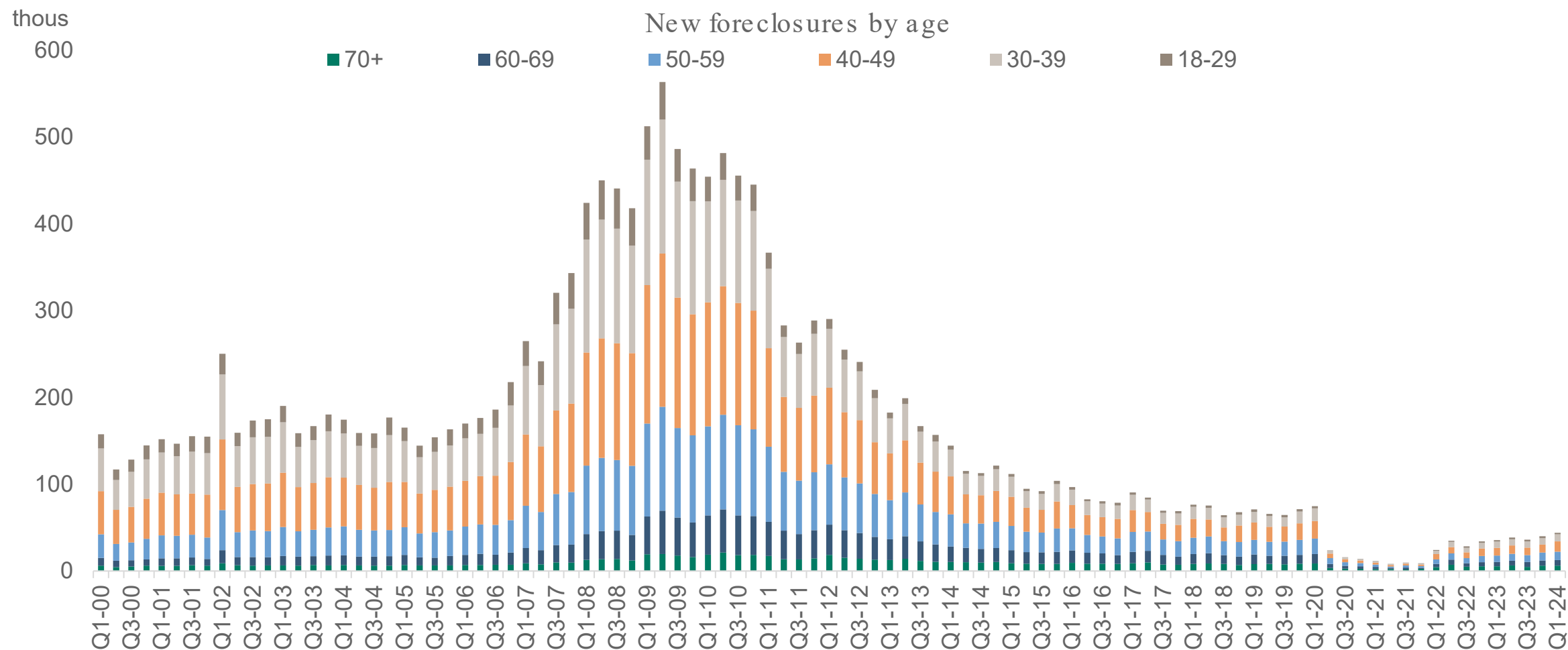


# Despite high mortgage rates, 30% of homes selling above their list price



4) Housing Outlook: High mortgage rates, high home prices, rising unemployment, high construction costs, and strong supply pipeline are risks to this housing cycle

# New foreclosures, by age of homeowner

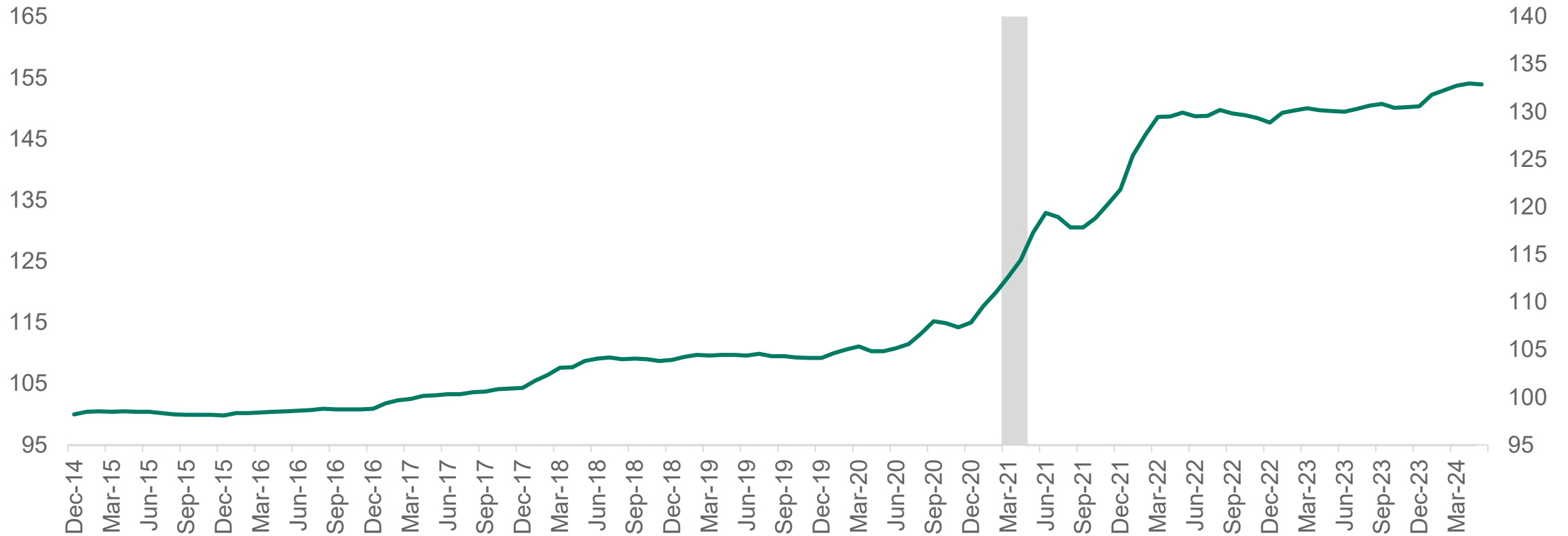


# Housing construction costs are high

1986 = 100, NSA

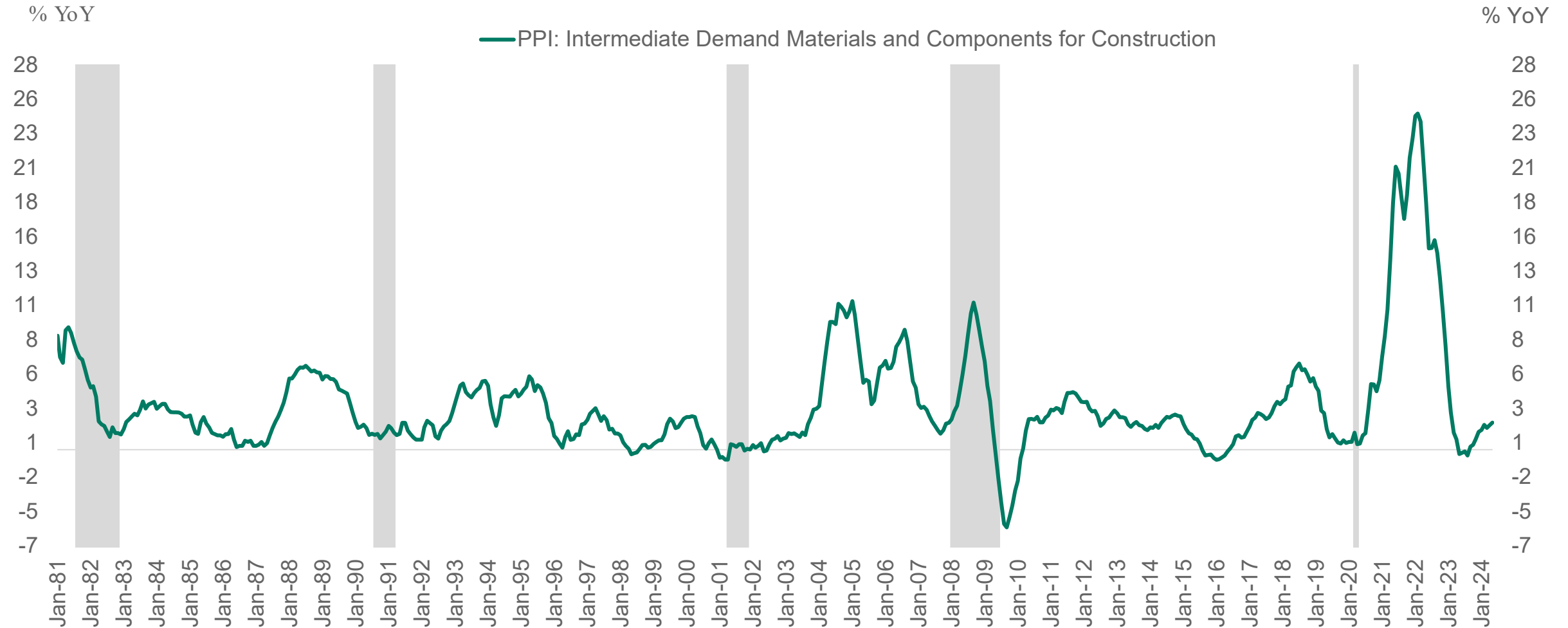
PPI: inputs to residential construction, goods less foods & energy inputs

1986 = 100, NSA

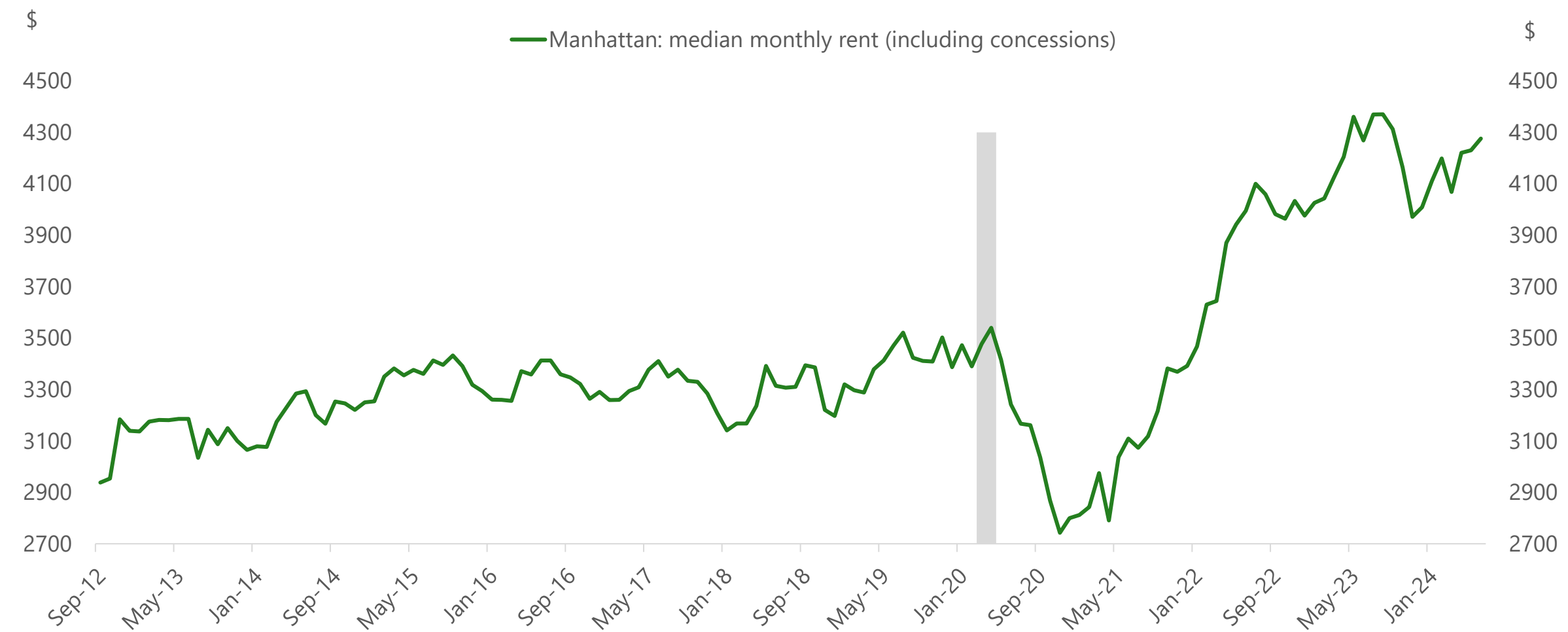




# Inflation in input costs for home builders rising

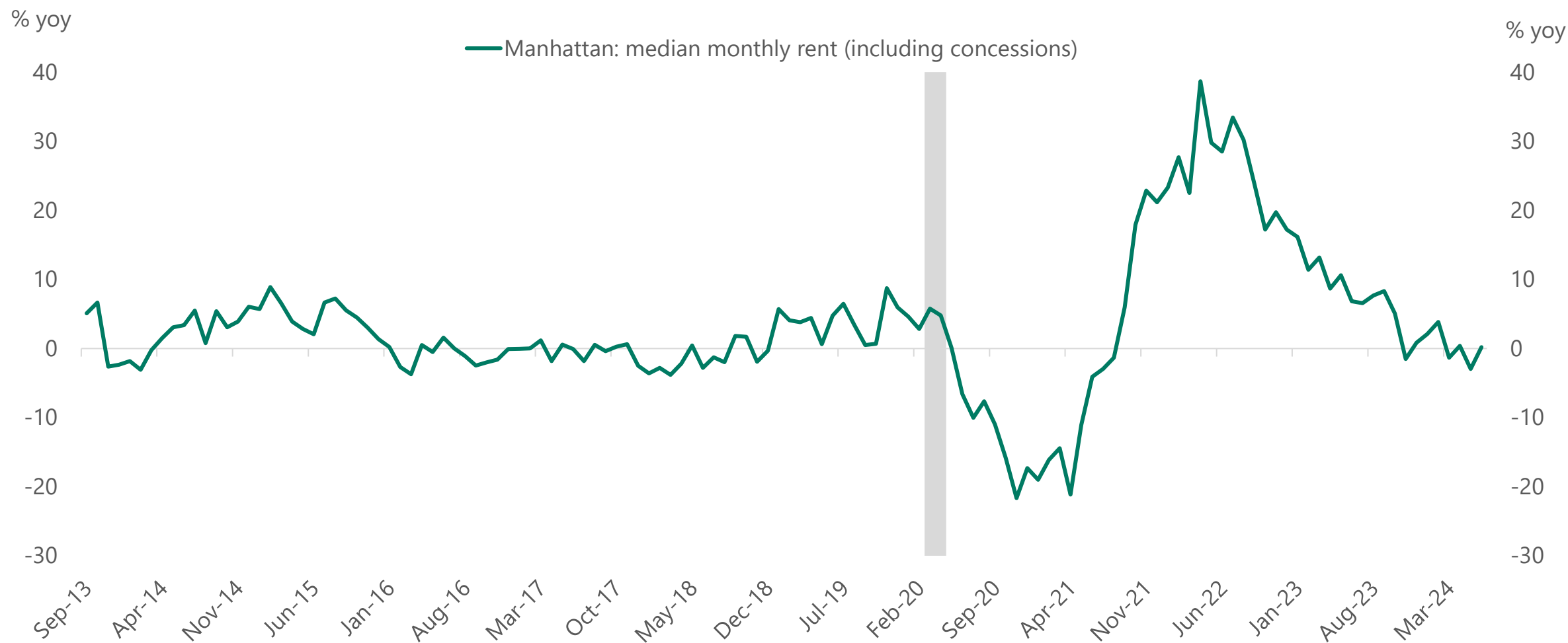


# Manhattan median rent rose to \$4276 in June 2024

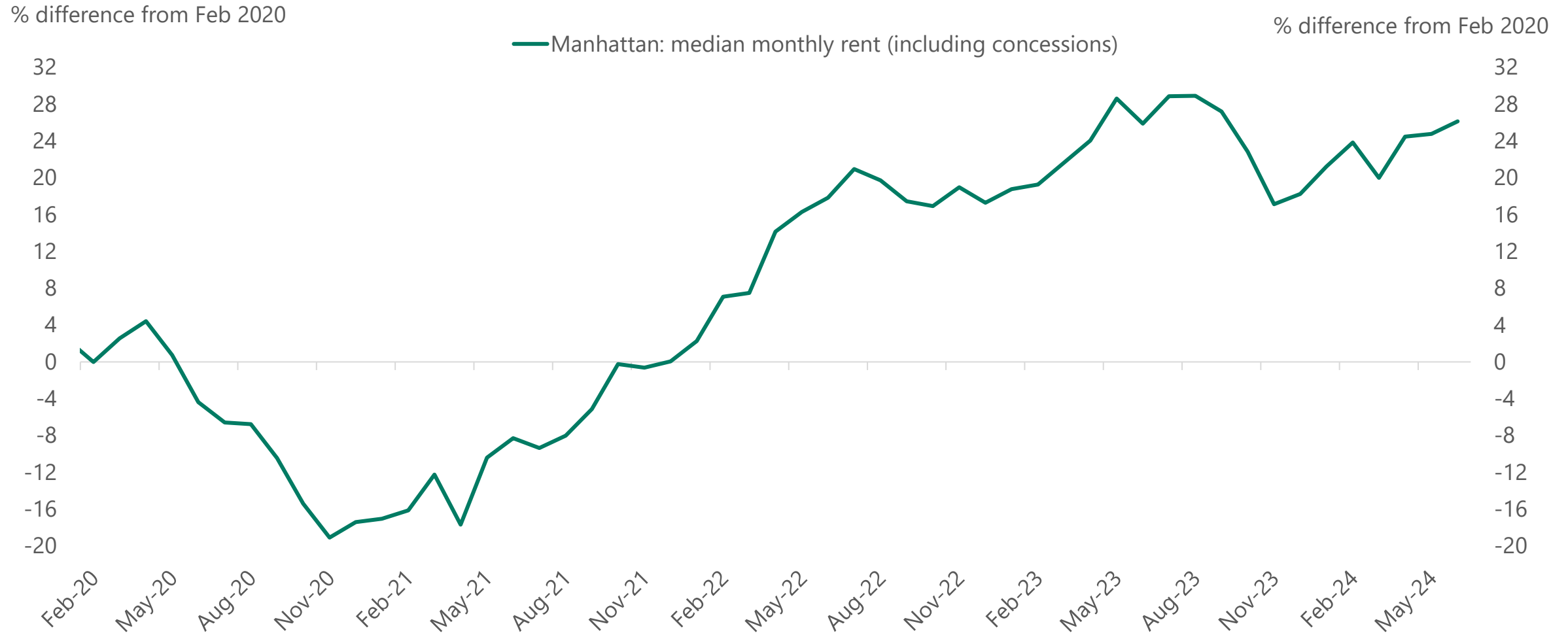


Source: Elliman, Apollo Chief Economist

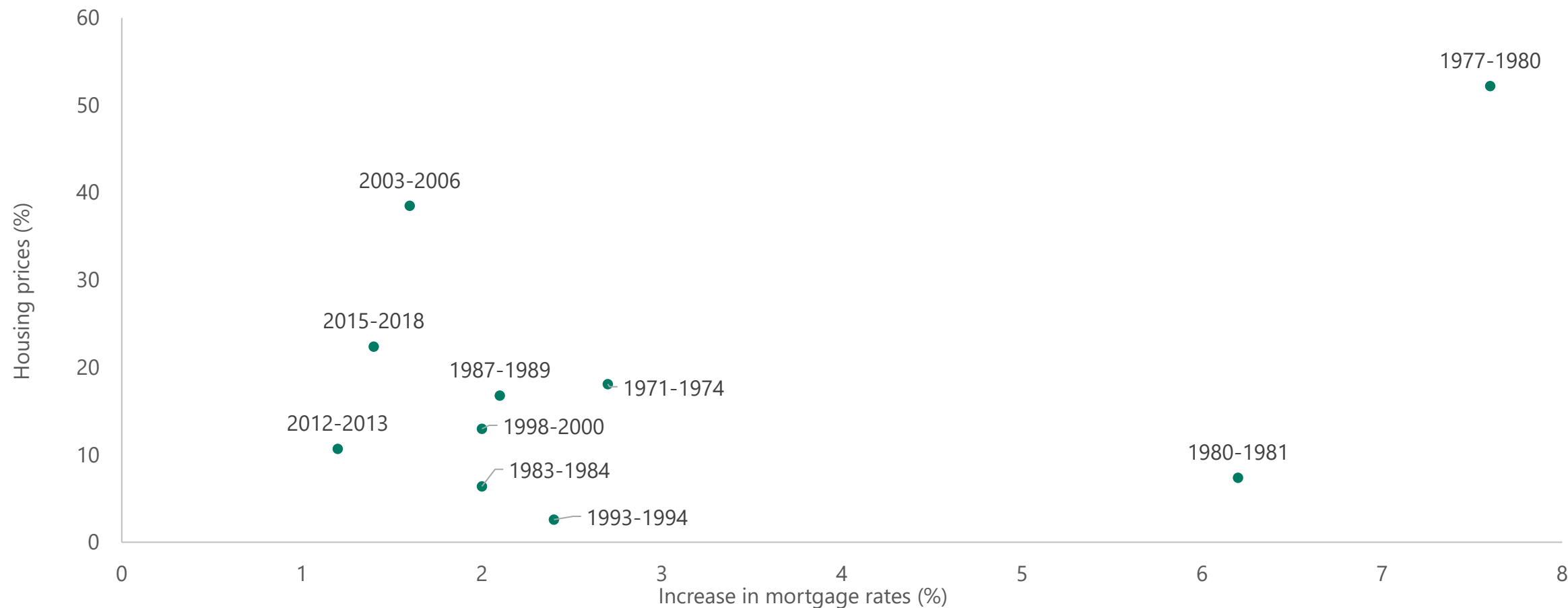
# Manhattan rent growth slowing



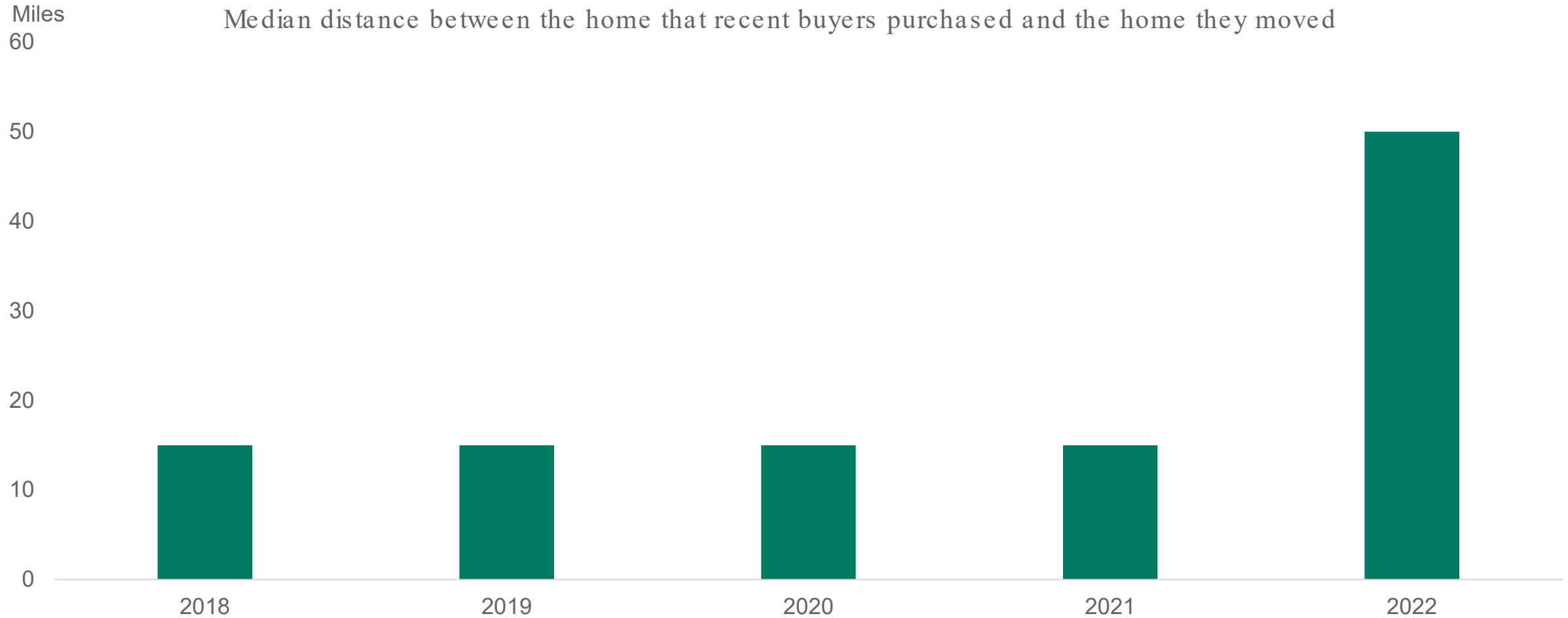
# Manhattan rents well above pre-pandemic levels



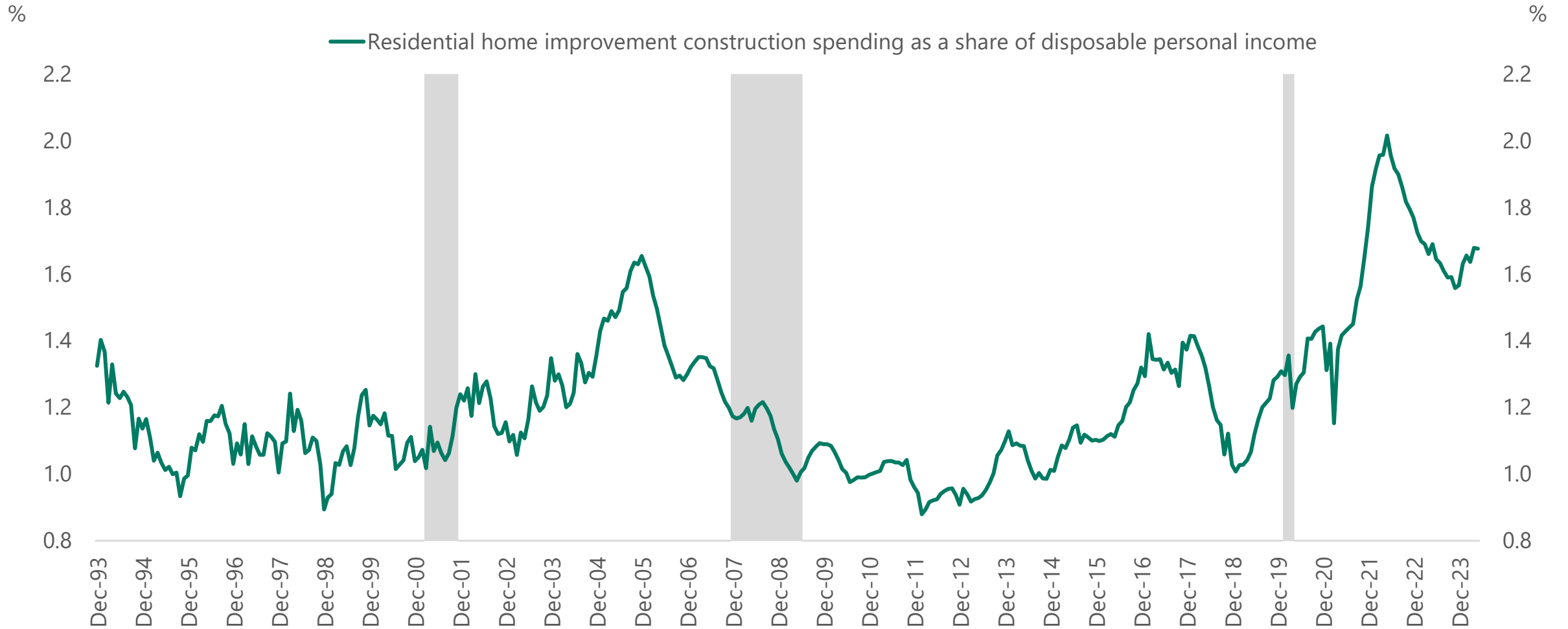
# Rising mortgage rates generally associated with lower home price inflation



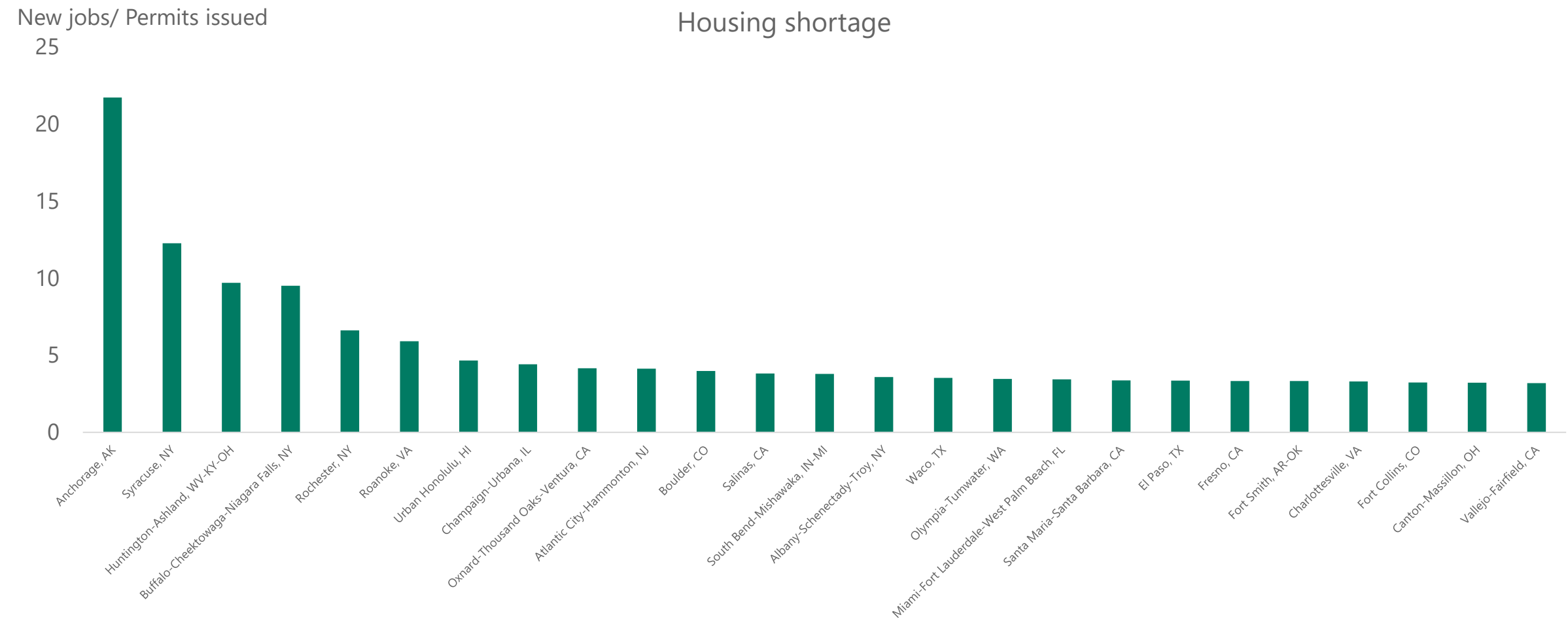
# Median distance between the home that recent buyers purchased and the home they moved from at 50 miles in 2022



# Home improvement spending remains elevated



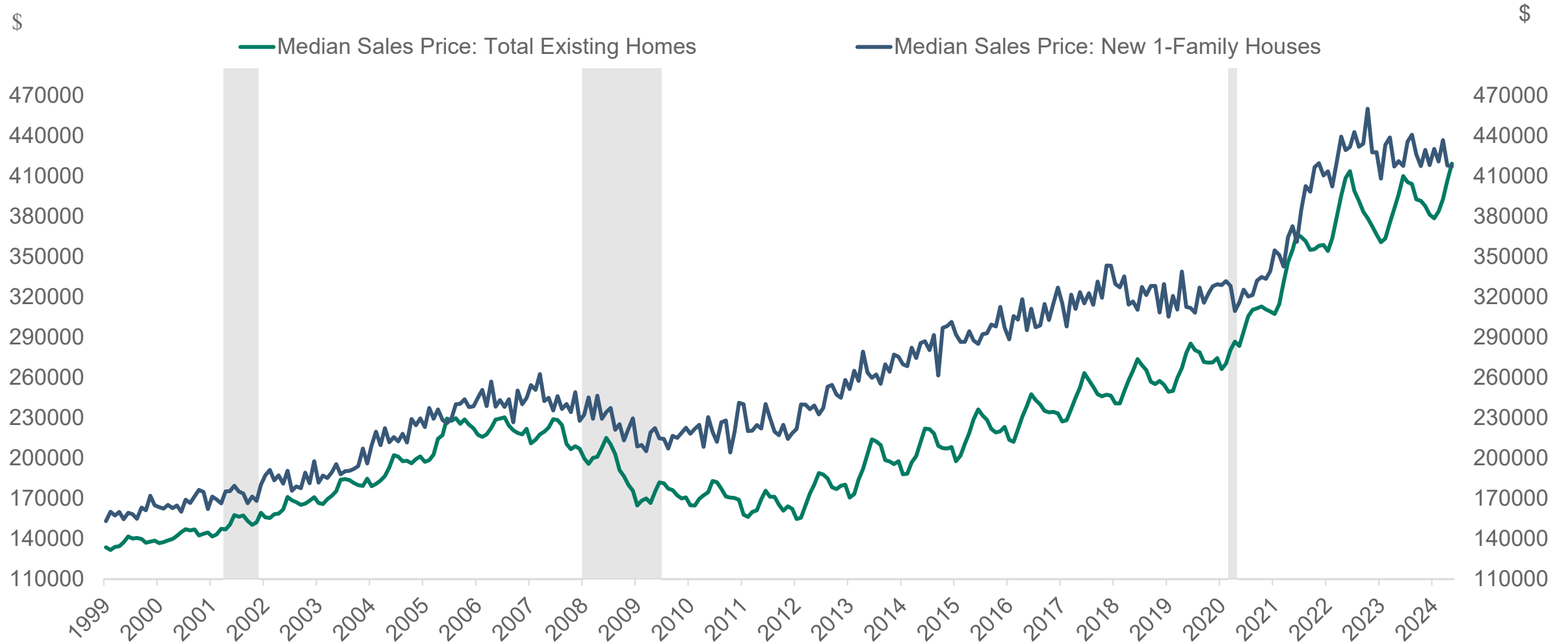
# Areas that need to build more houses to keep up with the increased demand



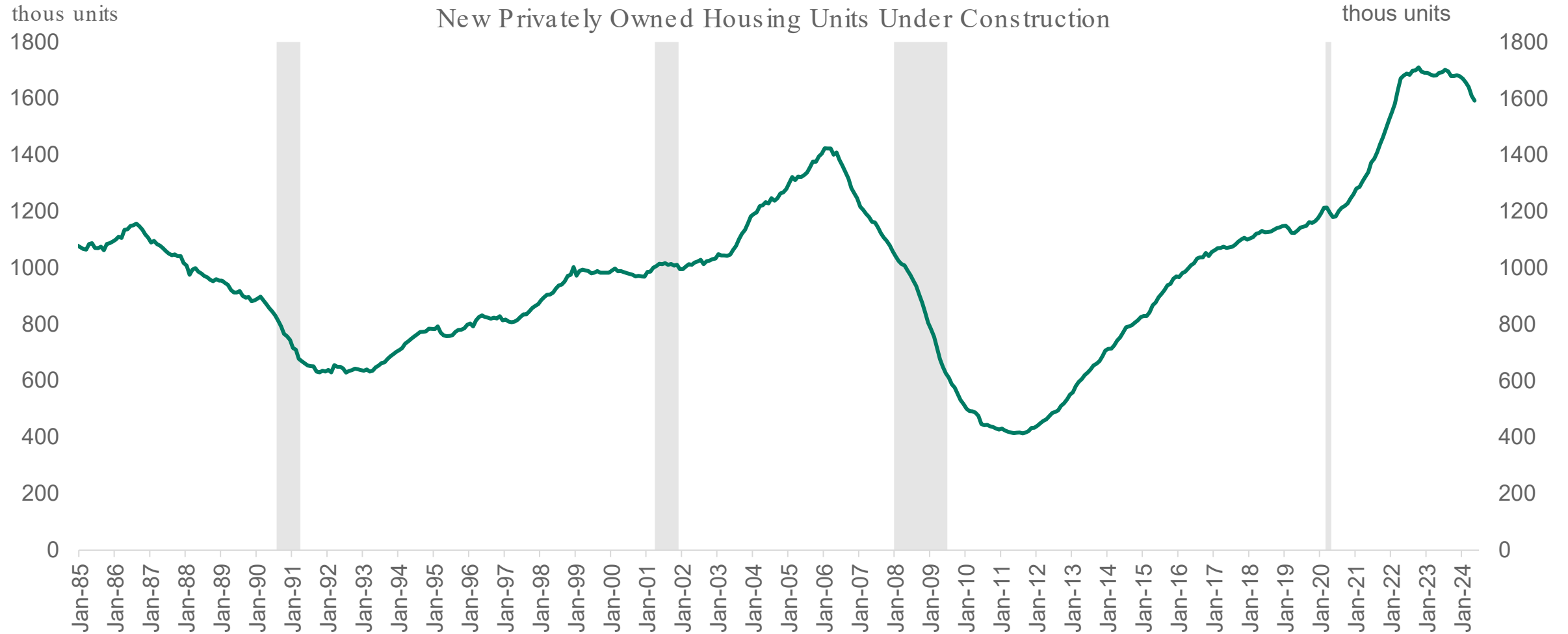


New versus existing homes

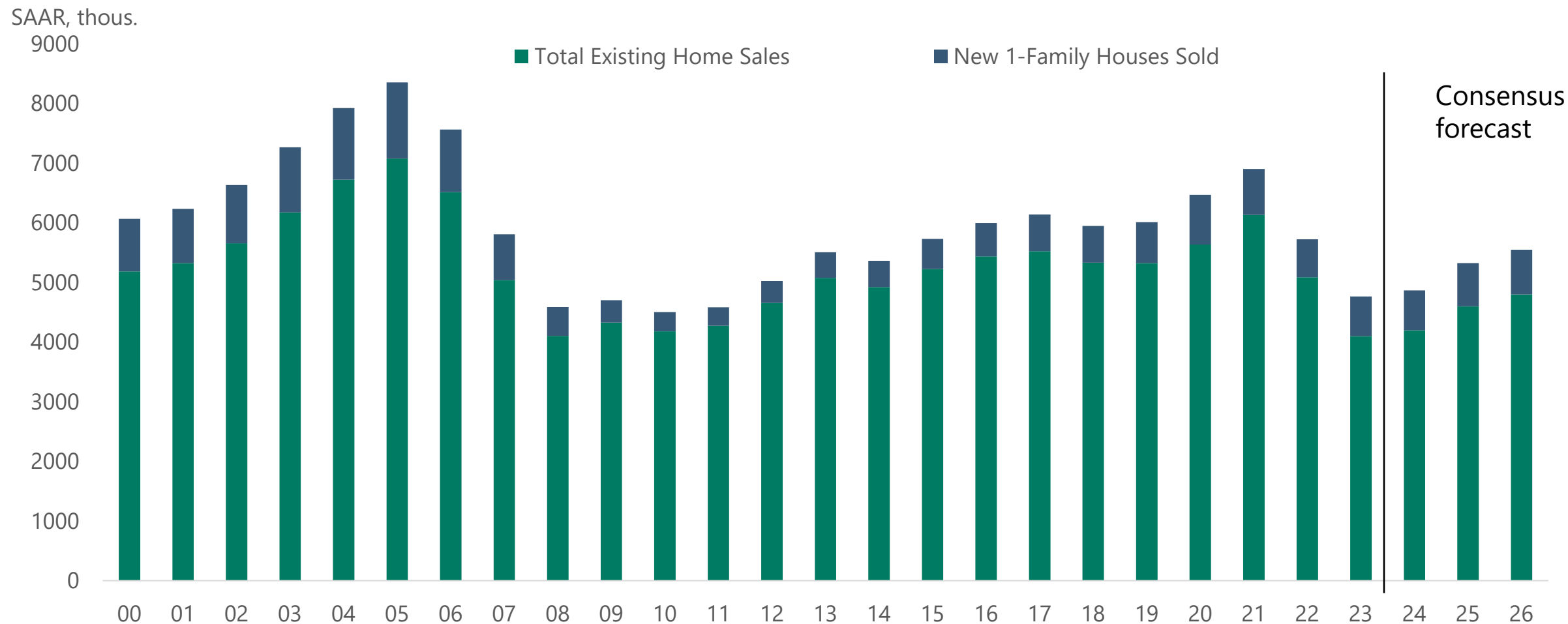
# House prices for new homes and existing homes



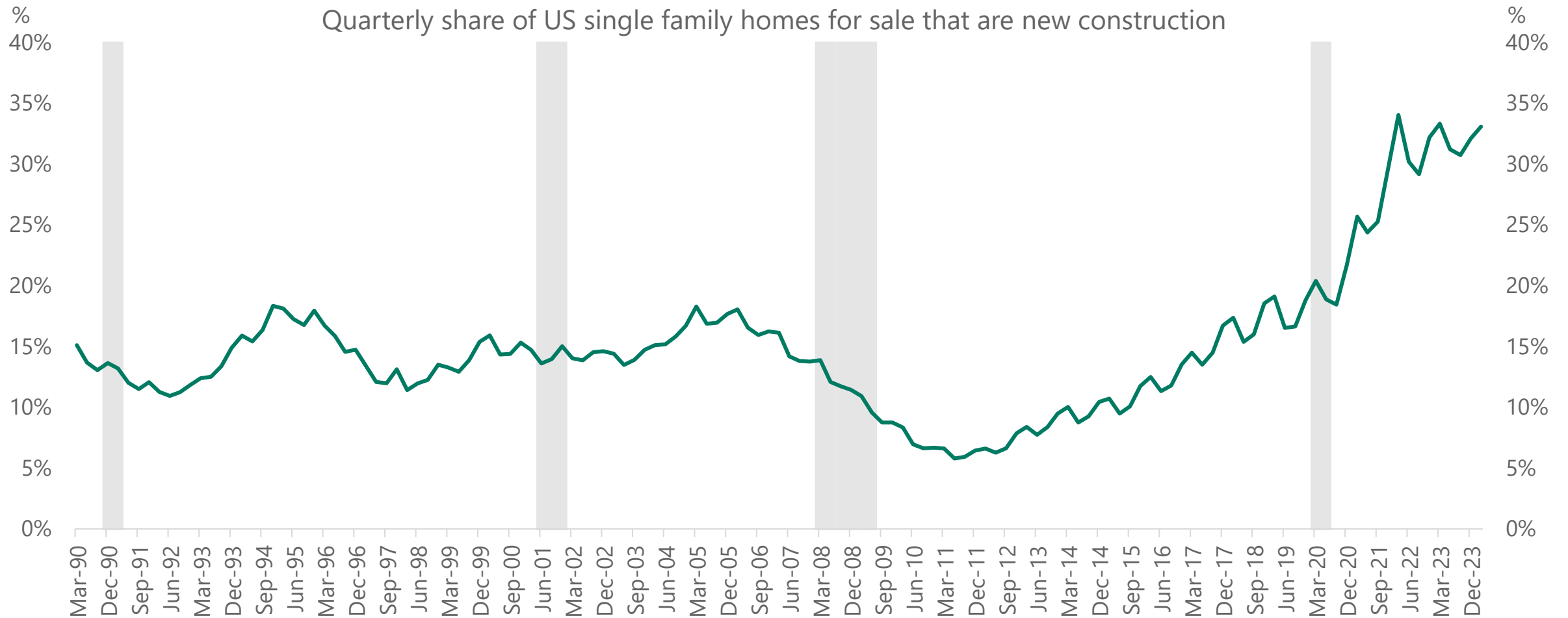
# New privately owned housing units under construction starting to peak



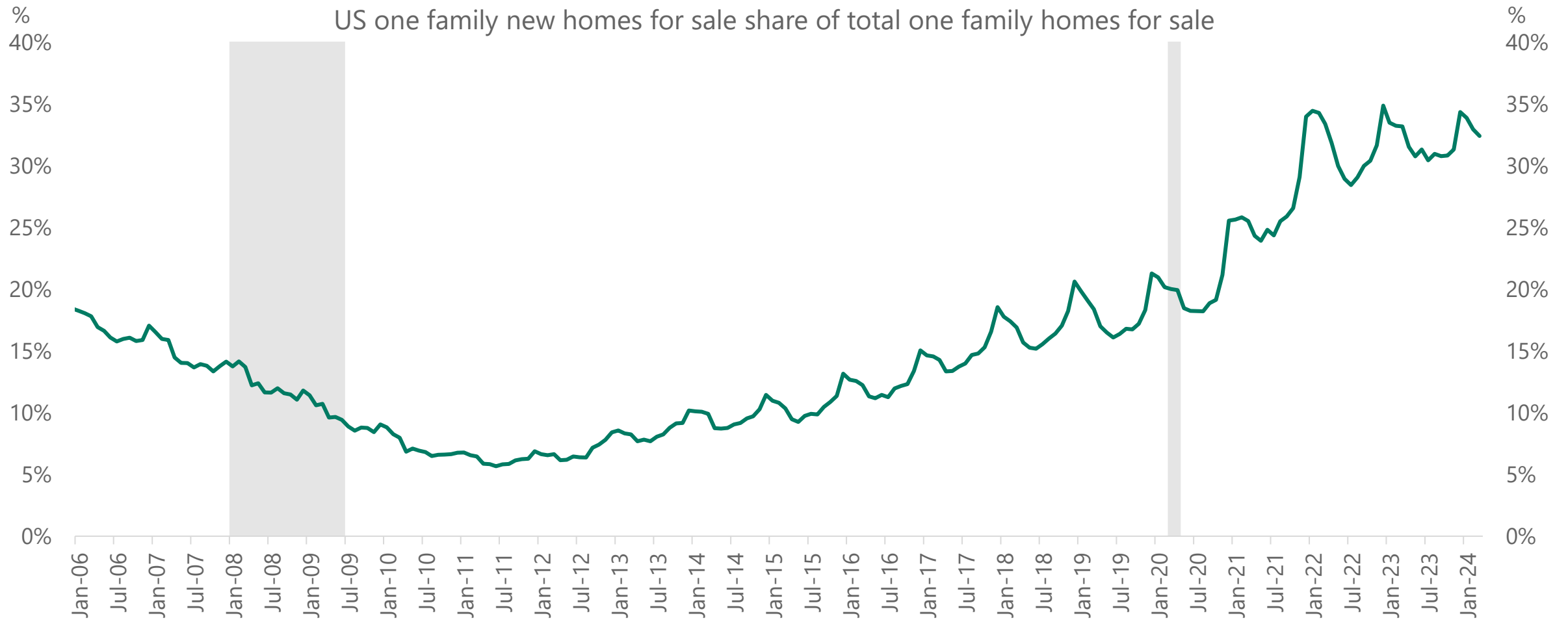
# Consensus is forecasting a modest rebound in home sales



# Share of newly built homes for sale rising

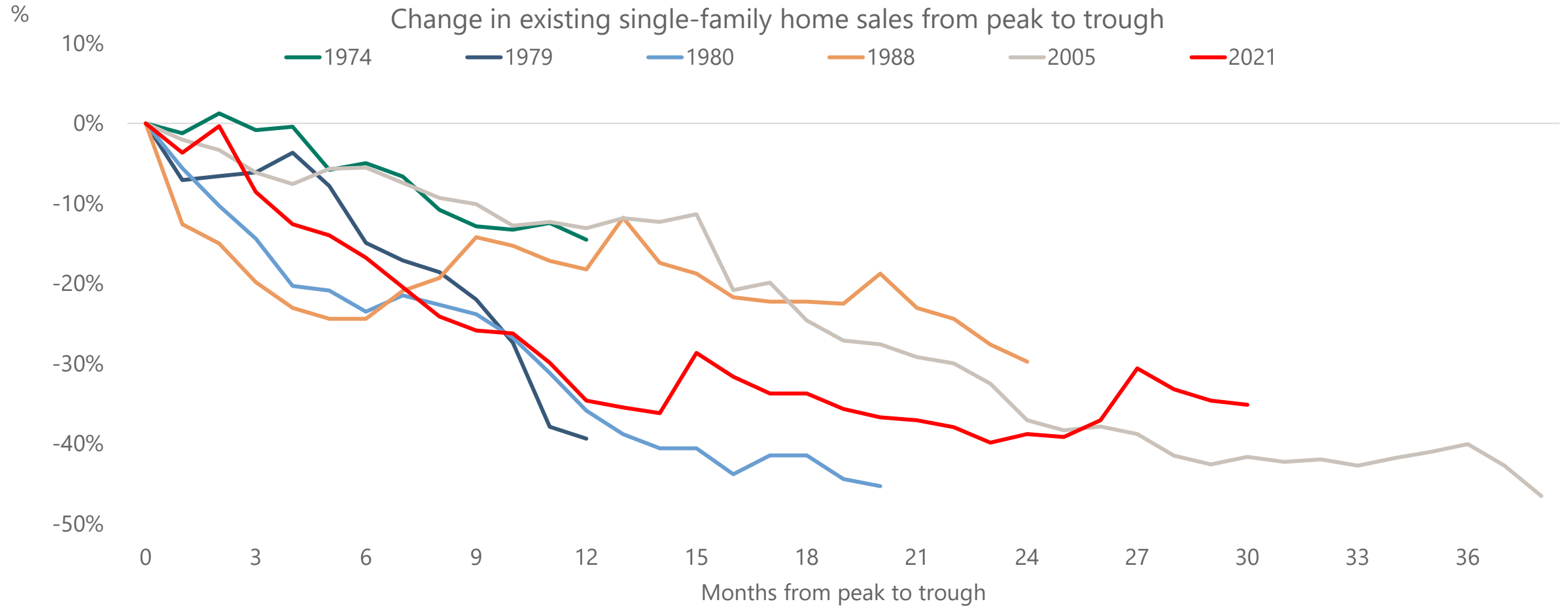


# Share of new homes for sale rising



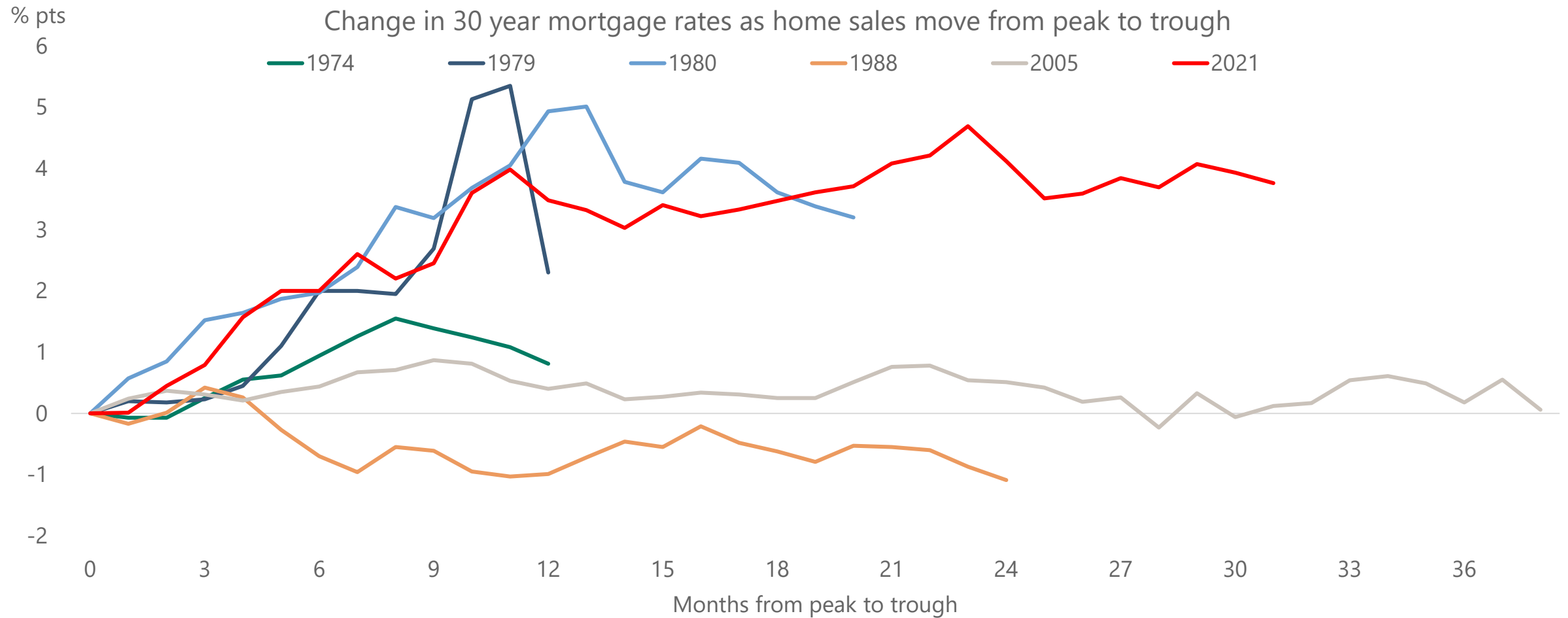
Comparing the current housing slowdown to previous housing slowdowns

# The current decline in existing home sales is in line with previous housing slowdowns

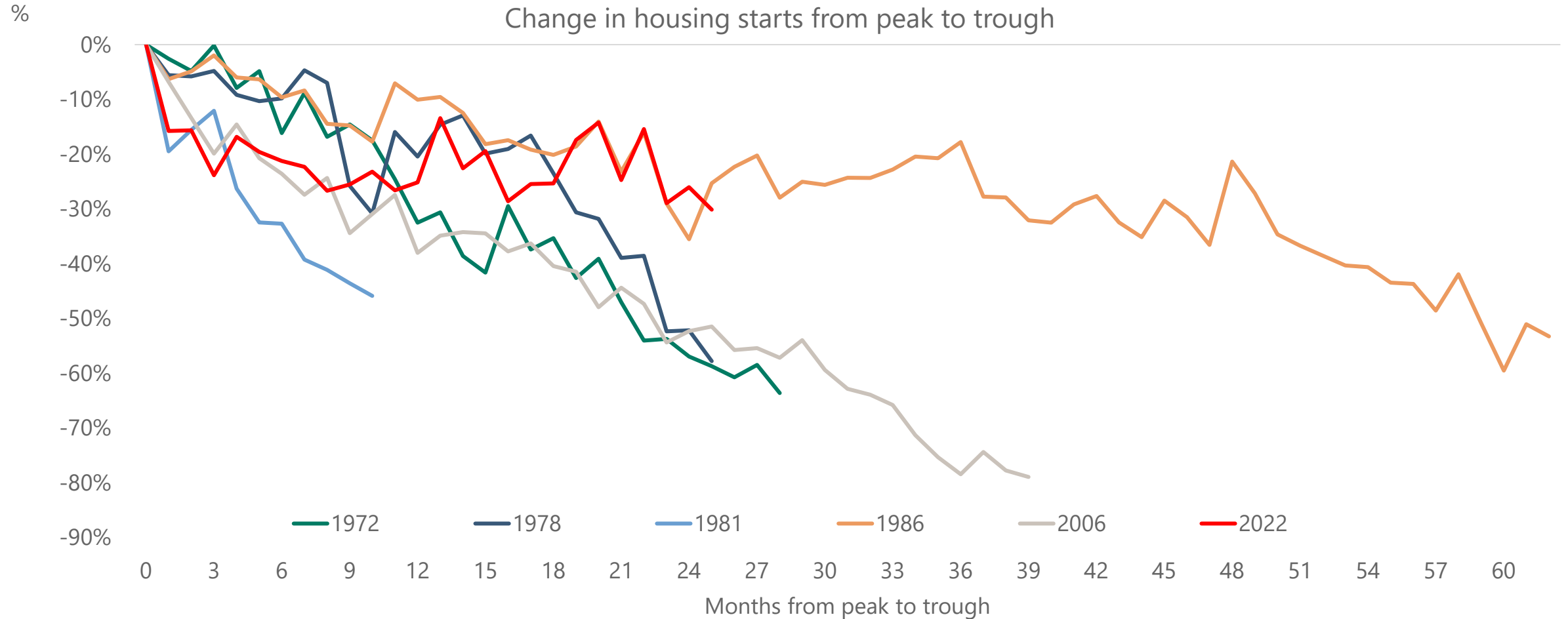




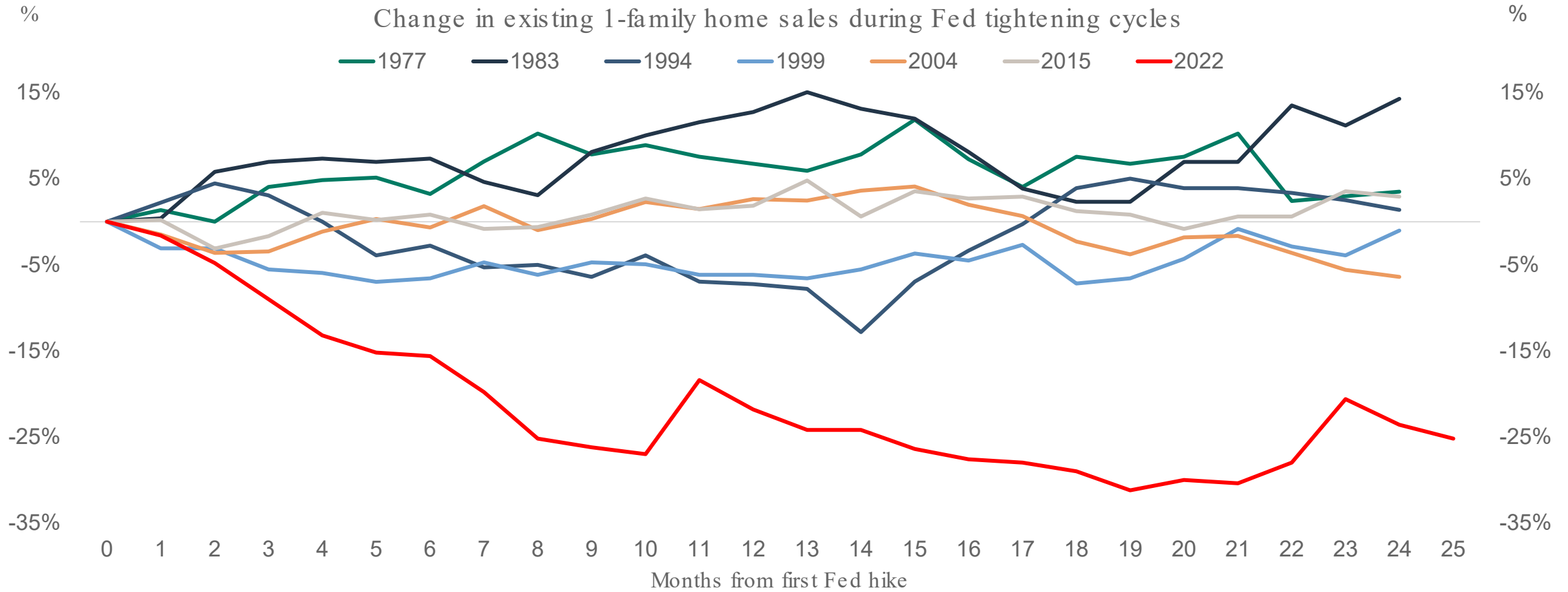
The current rise in mortgage rates is similar to what we saw during the Volcker disinflation



# The current decline in housing starts follows the pattern of previous slowdowns



# This is the fastest Fed-driven housing slowdown on record

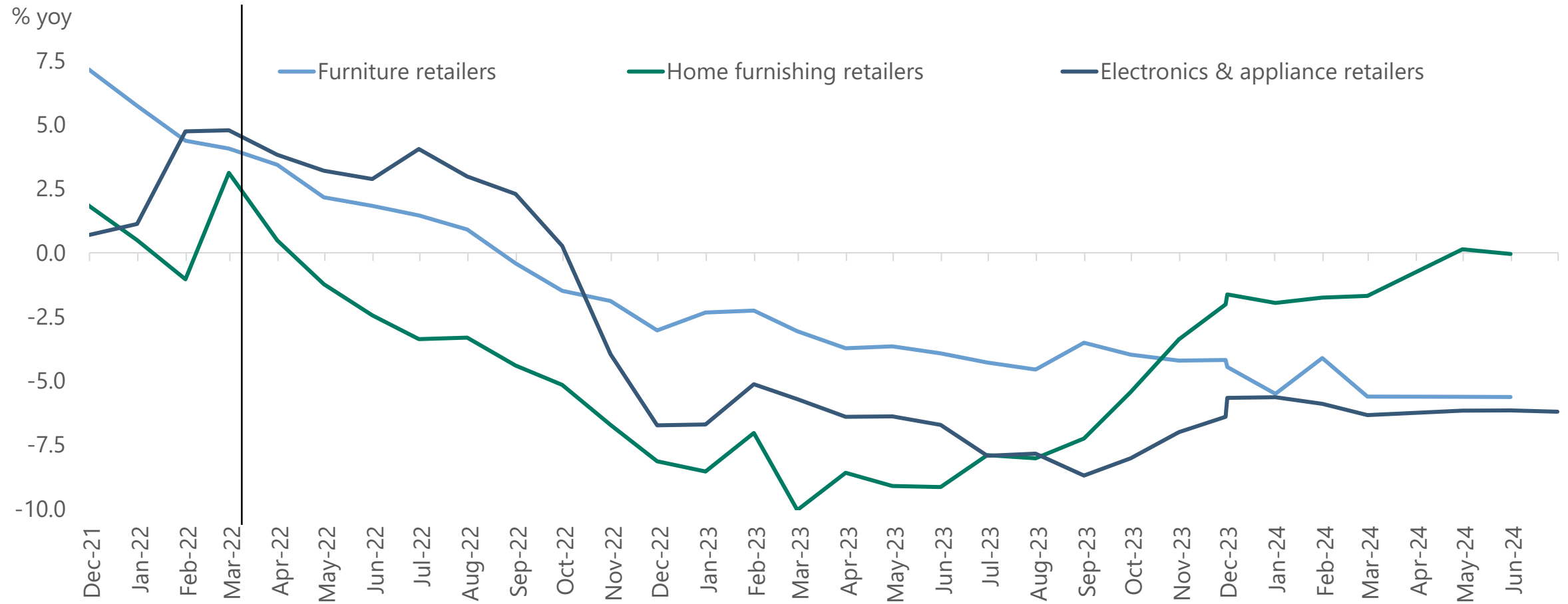


# Apartment vacancies are back above pre-pandemic levels

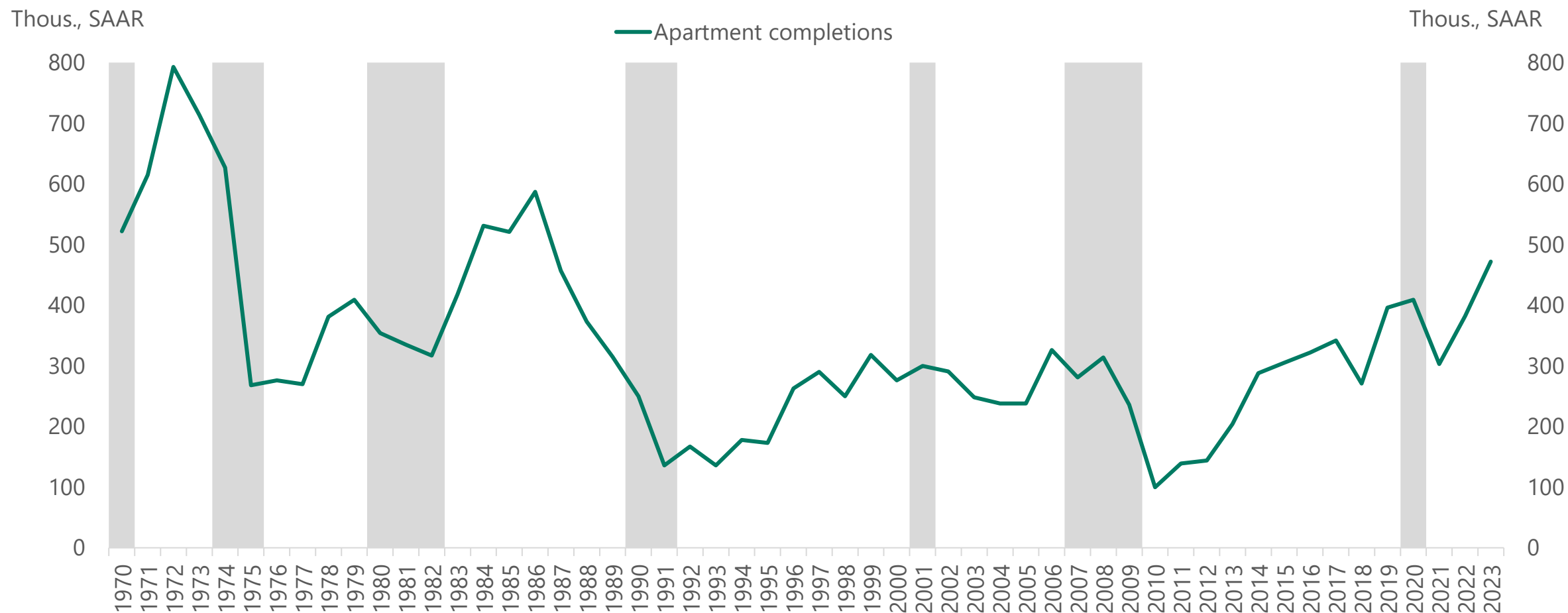


Source: Apartmentlist.com, Apollo Chief Economist

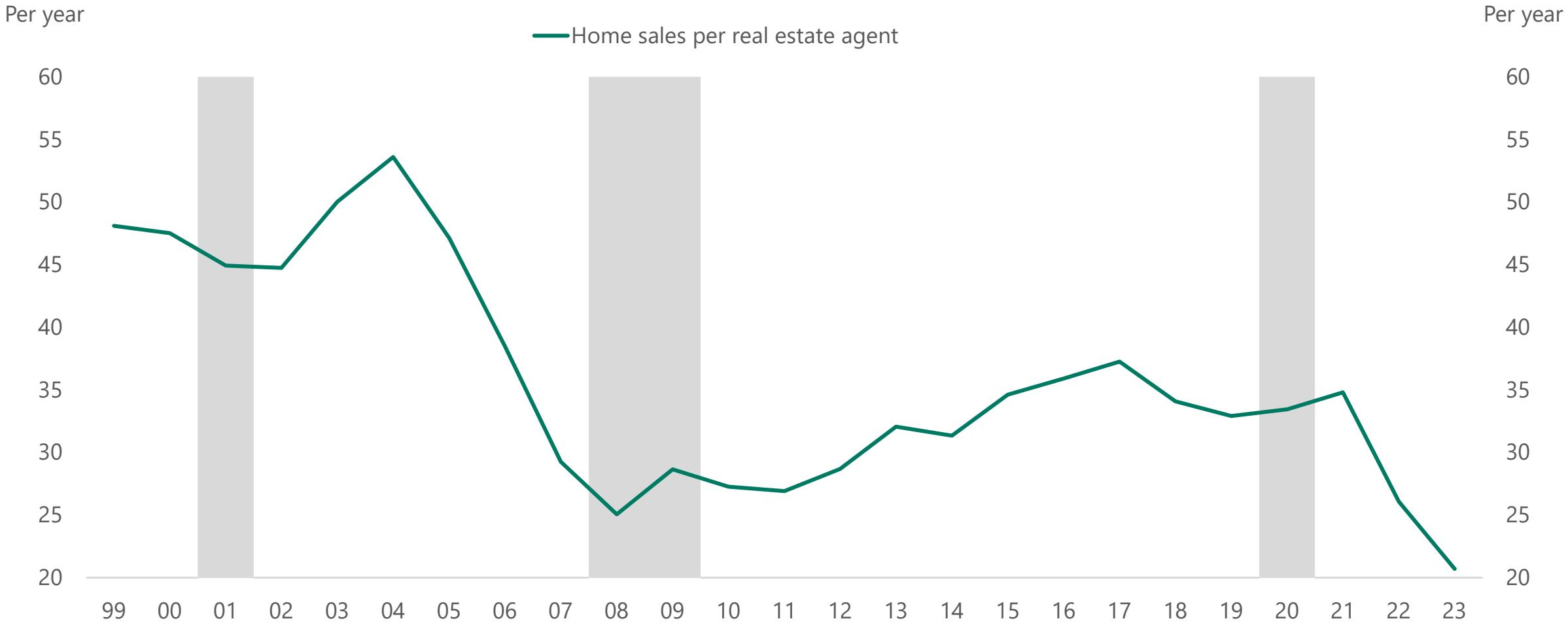
# When the Fed raised interest rates employment in retail trade declined



# US apartment supply increasing

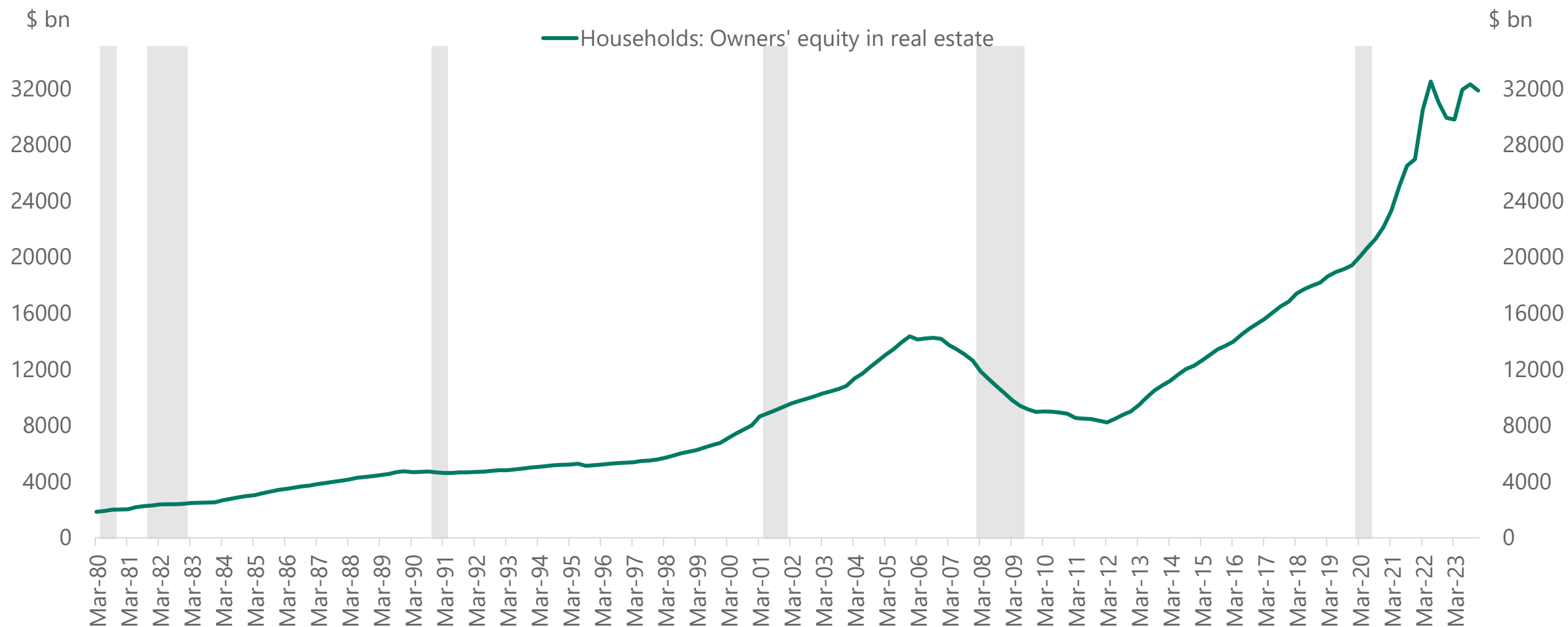


# Real estate sales agents face more challenges



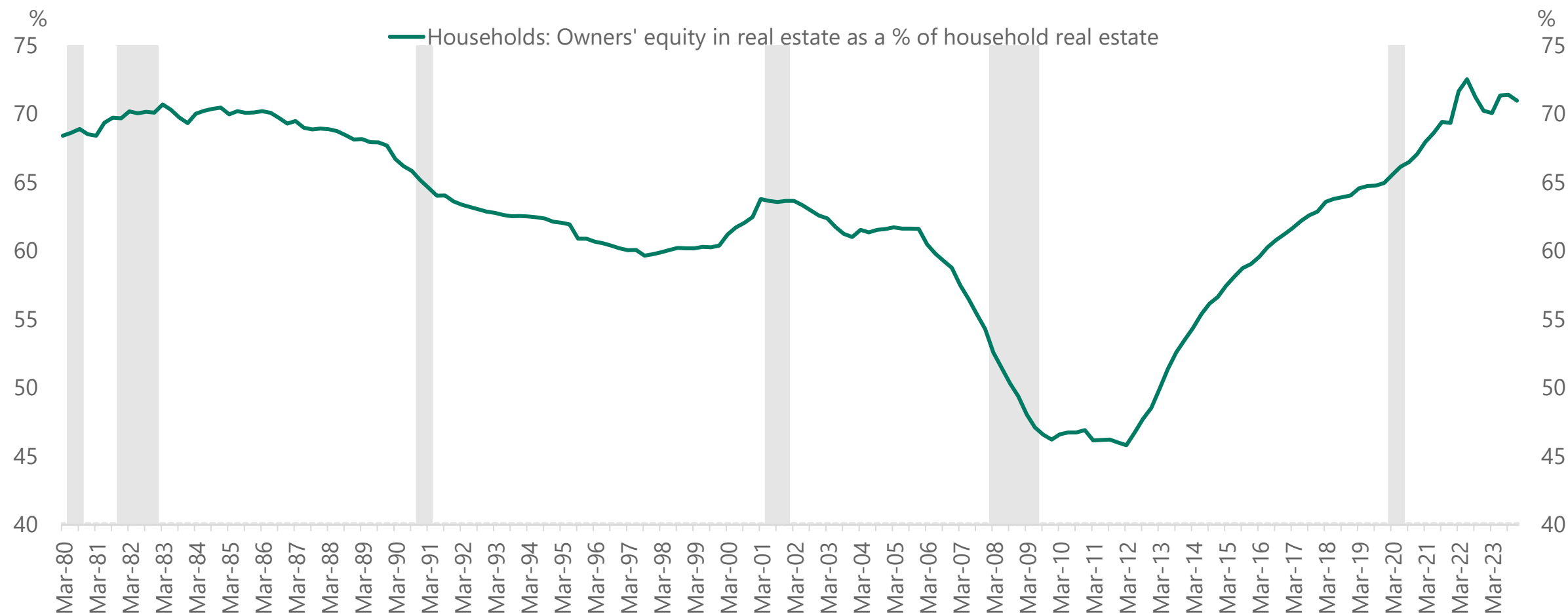
Source: NAR, BLS, Haver Analytics Apollo Chief Economist

# Households equity in real estate rising

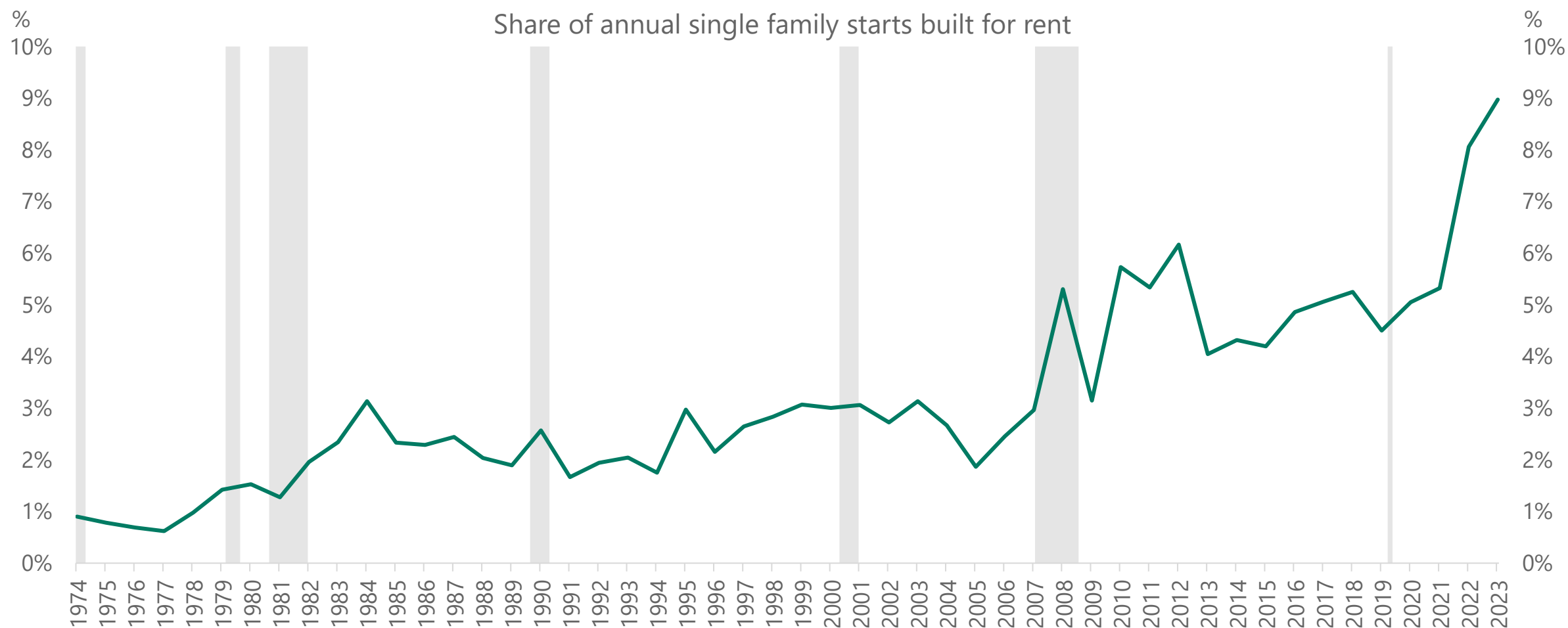




# Households equity share in real estate rising



# Share of homes built for rent going up





# Torsten Slok, Ph.D.

## Chief Economist

Apollo Global Management

[tslok@apollo.com](mailto:tslok@apollo.com)

Torsten Slok joined Apollo in August 2020 as Chief Economist and he leads Apollo's macroeconomic and market analysis across the platform.

Prior to joining, Mr. Slok worked for 15 years as Chief Economist at Deutsche Bank where his team was top ranked in the annual Institutional Investor survey for a decade. Prior to joining Deutsche Bank Mr. Slok worked at the IMF in Washington, DC and at the OECD in Paris.

Mr. Slok has a Ph.D in Economics and has studied at the University of Copenhagen and Princeton University.