

APOLLO

US Housing Outlook

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Unless otherwise noted, information as of January 2023.

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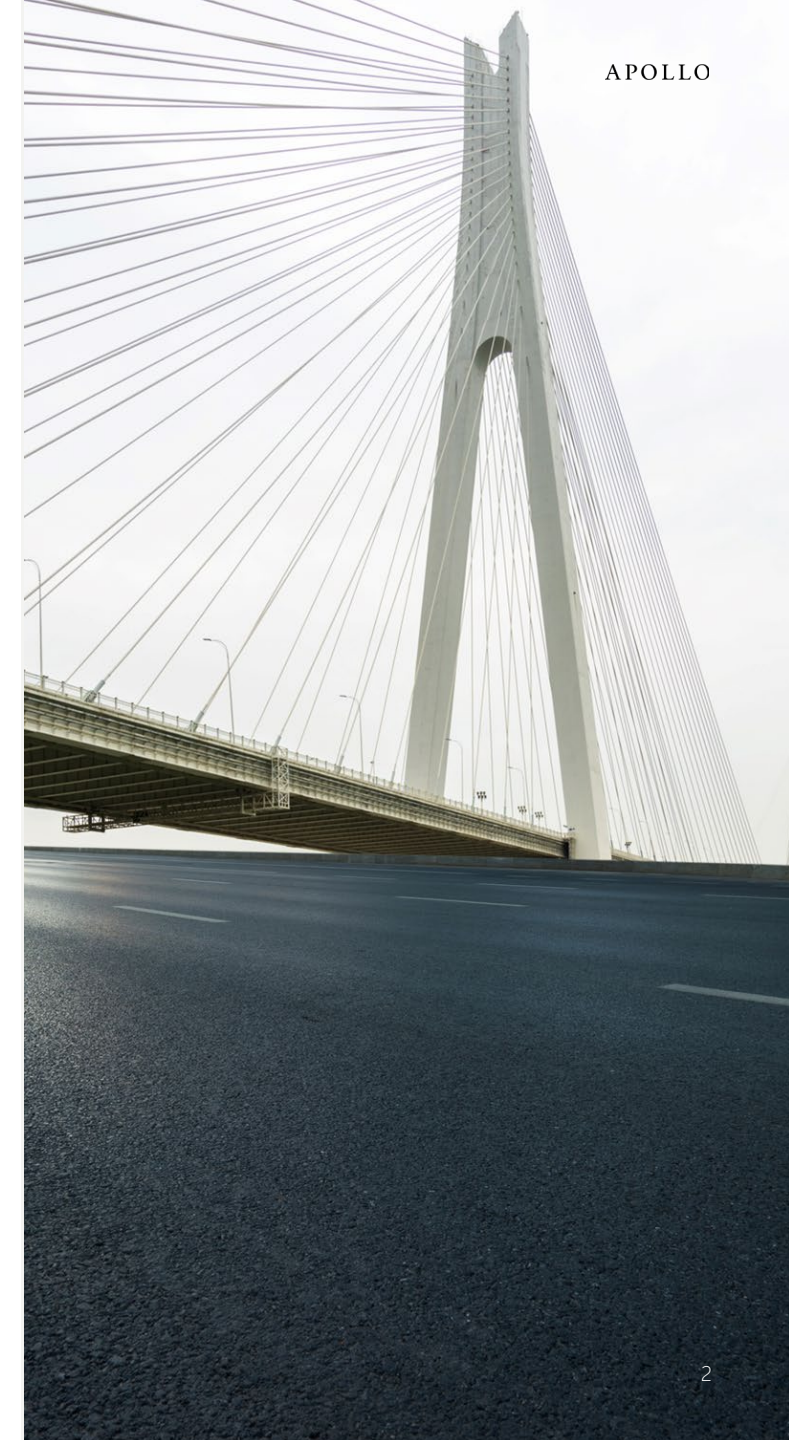
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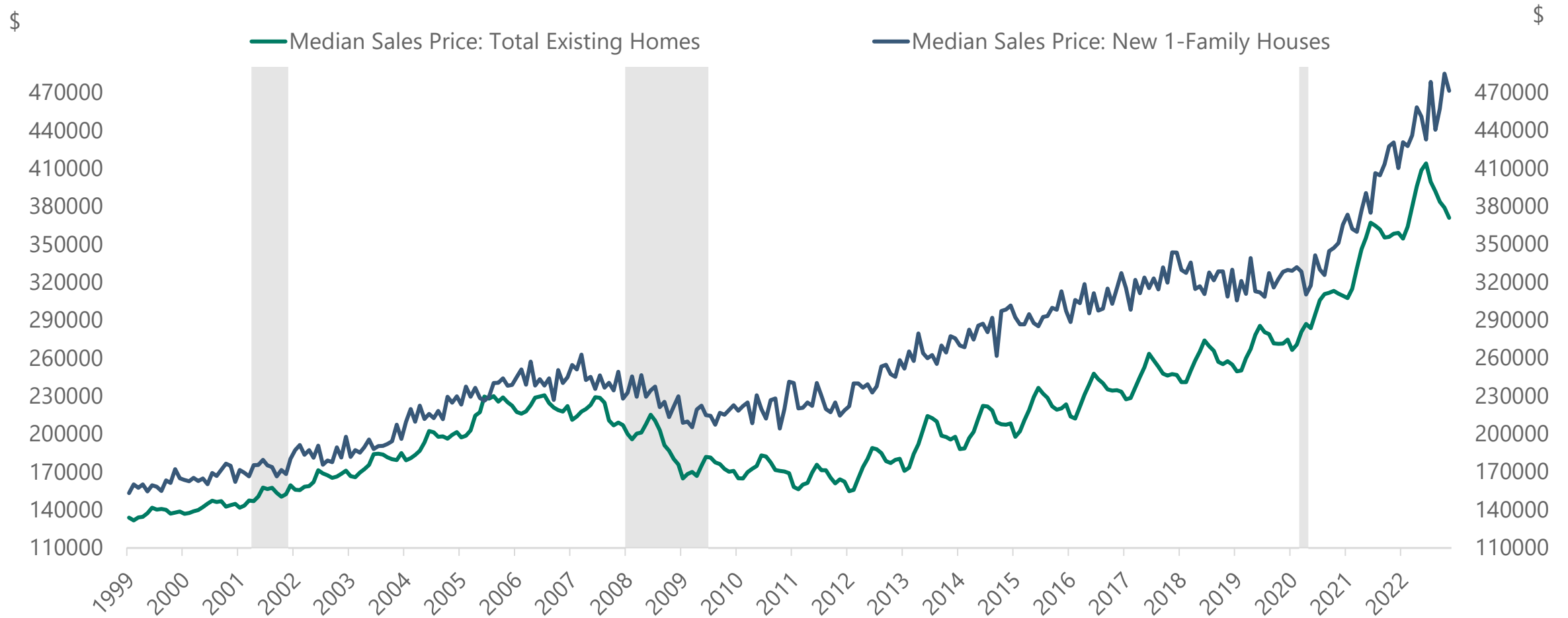
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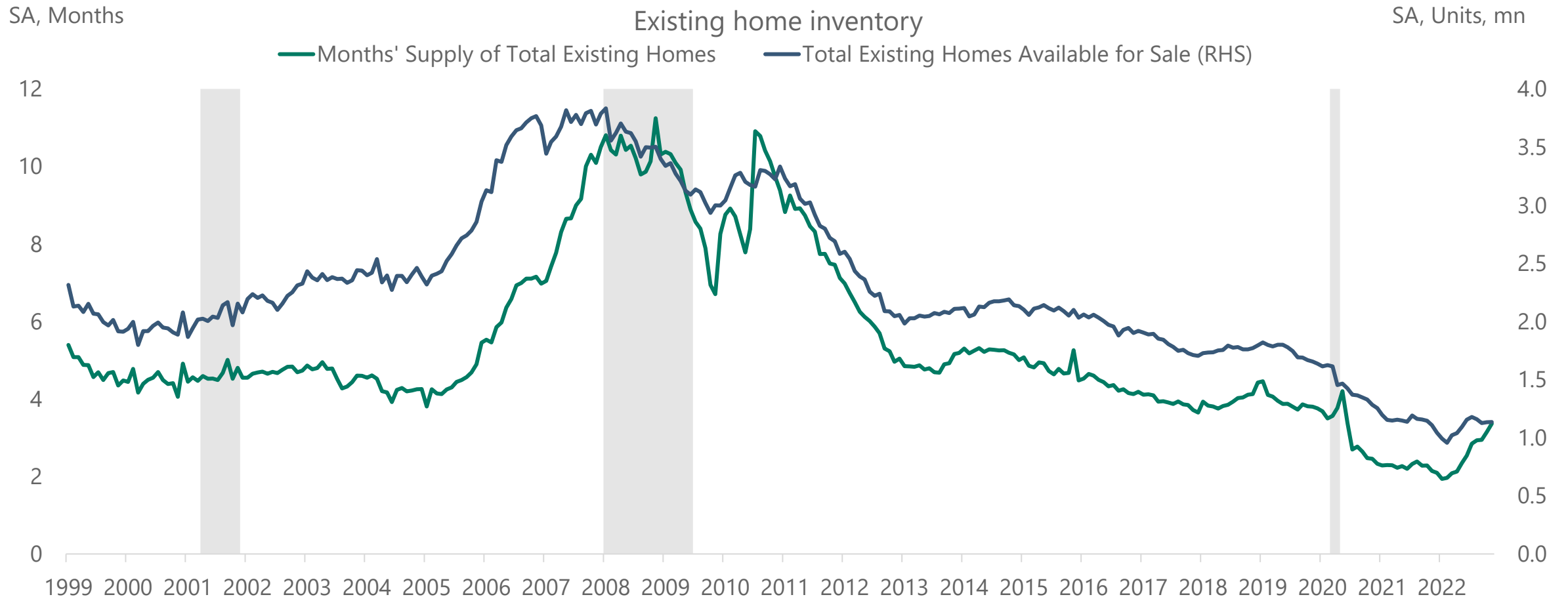


New versus existing homes

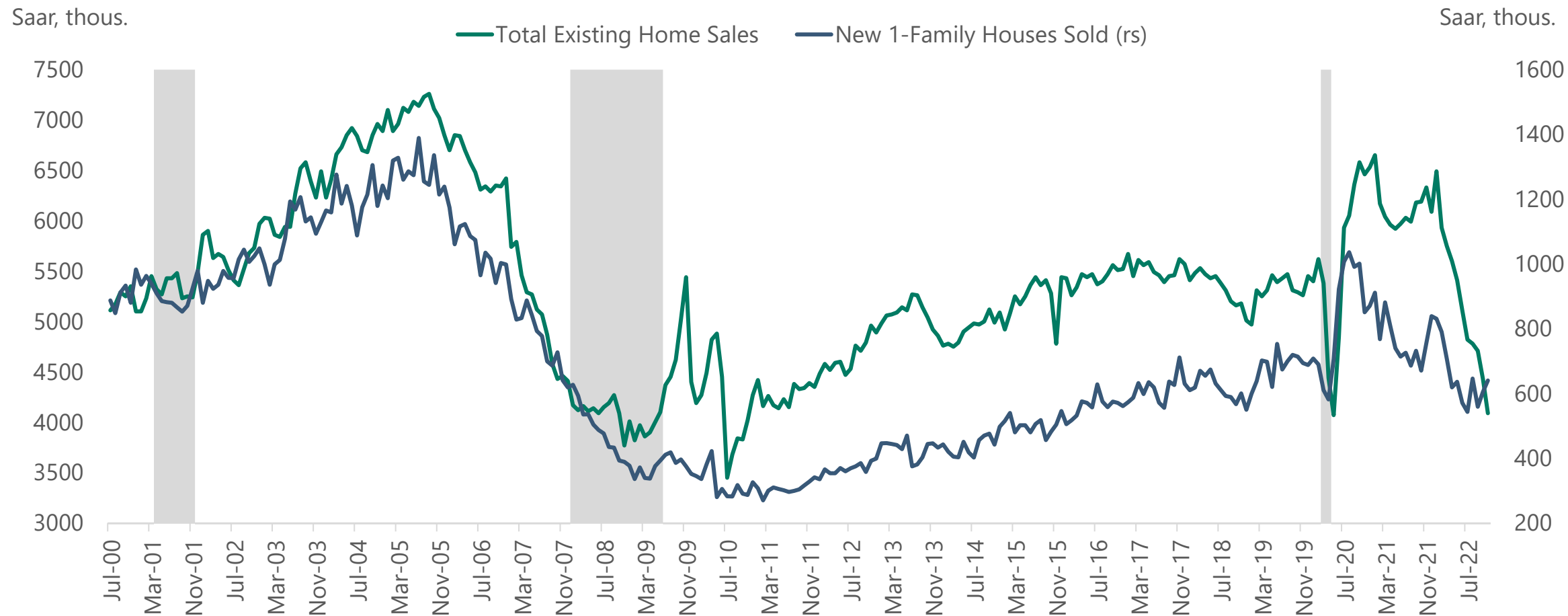
House prices are coming down for existing homes



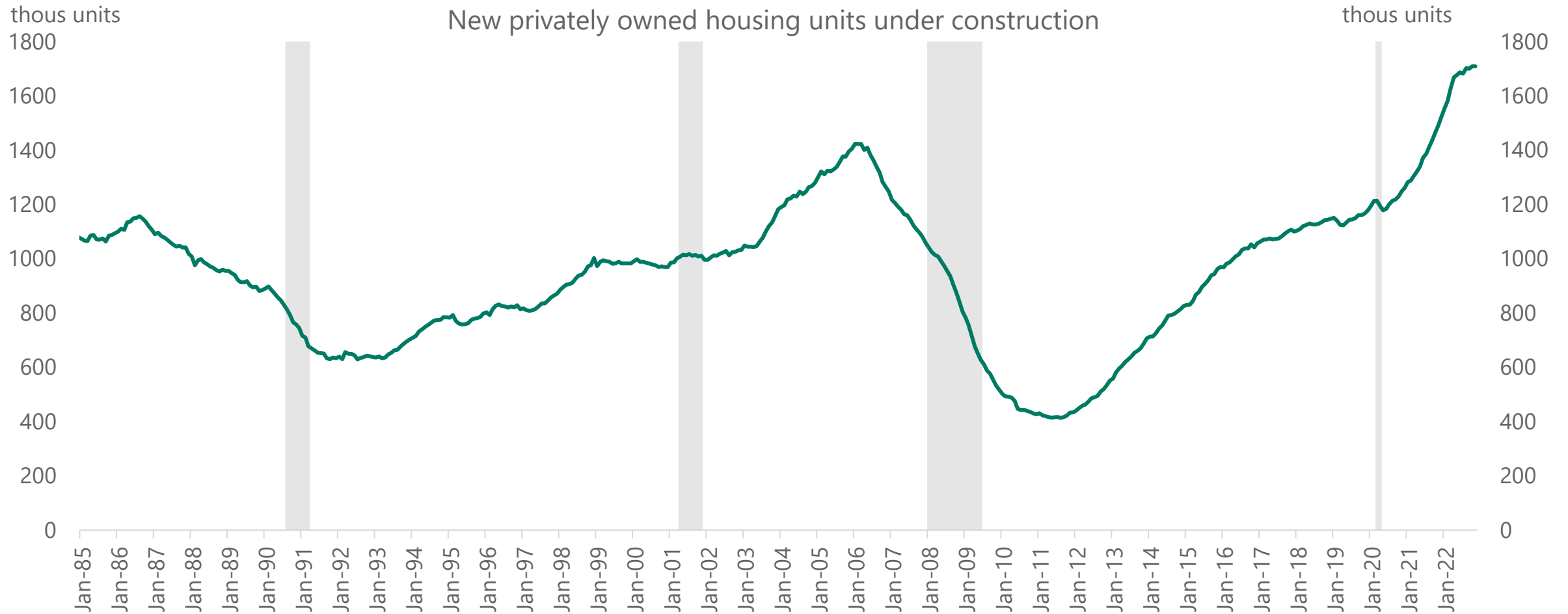
Inventory of existing homes for sale is rising but from a very low level



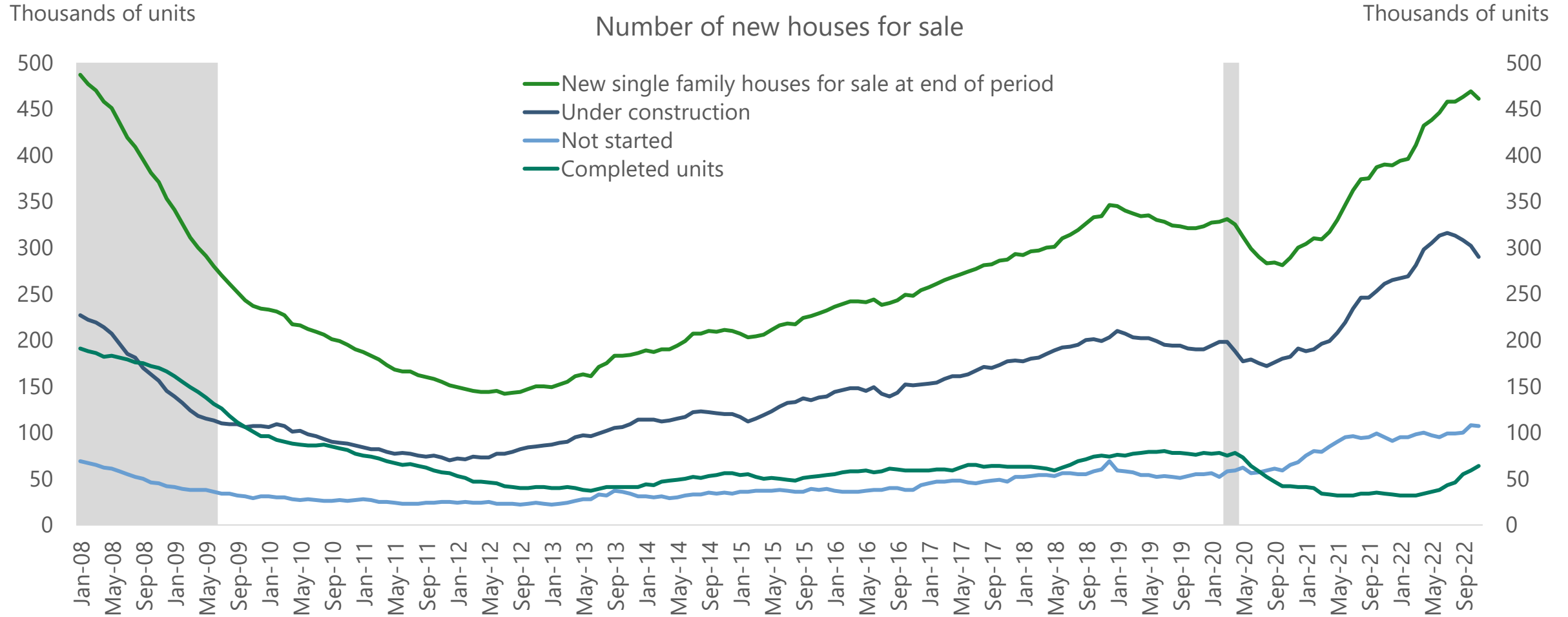
Significant drop in existing home sales



New privately owned housing units under construction at record highs

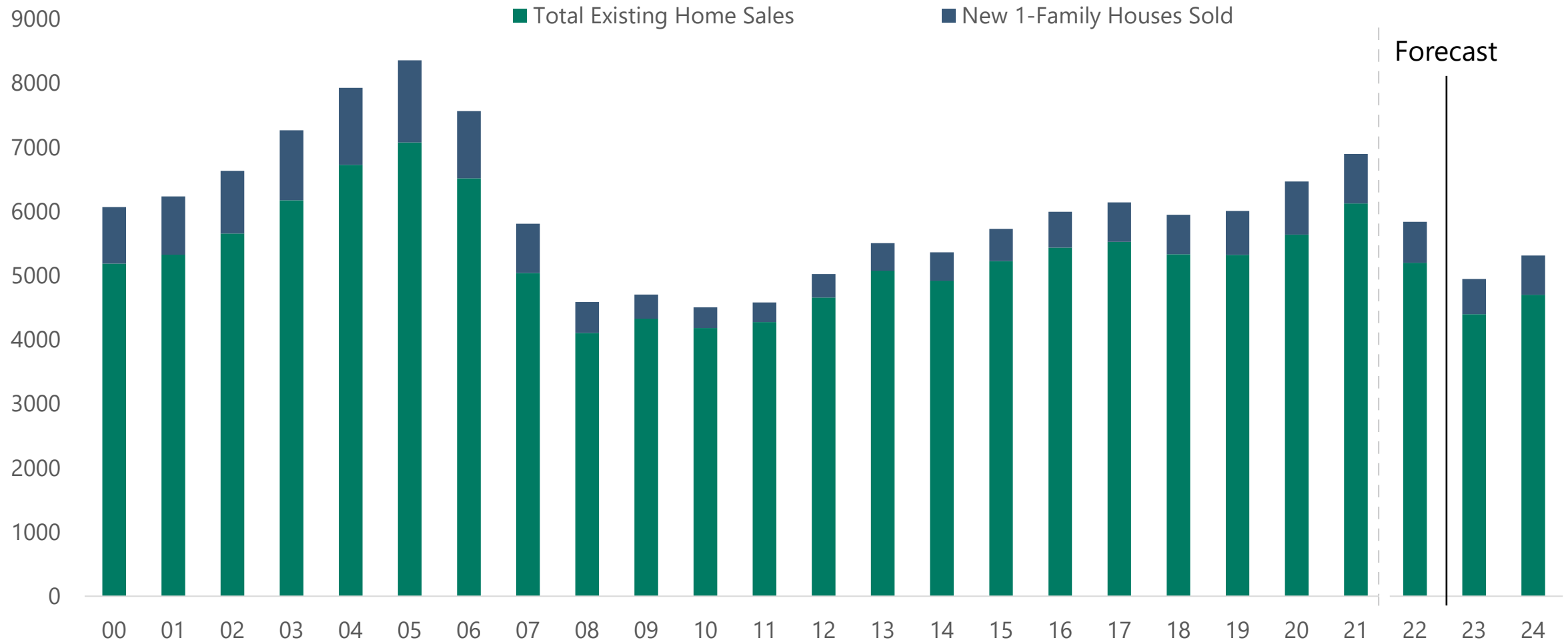


More new houses for sale where construction has not yet started



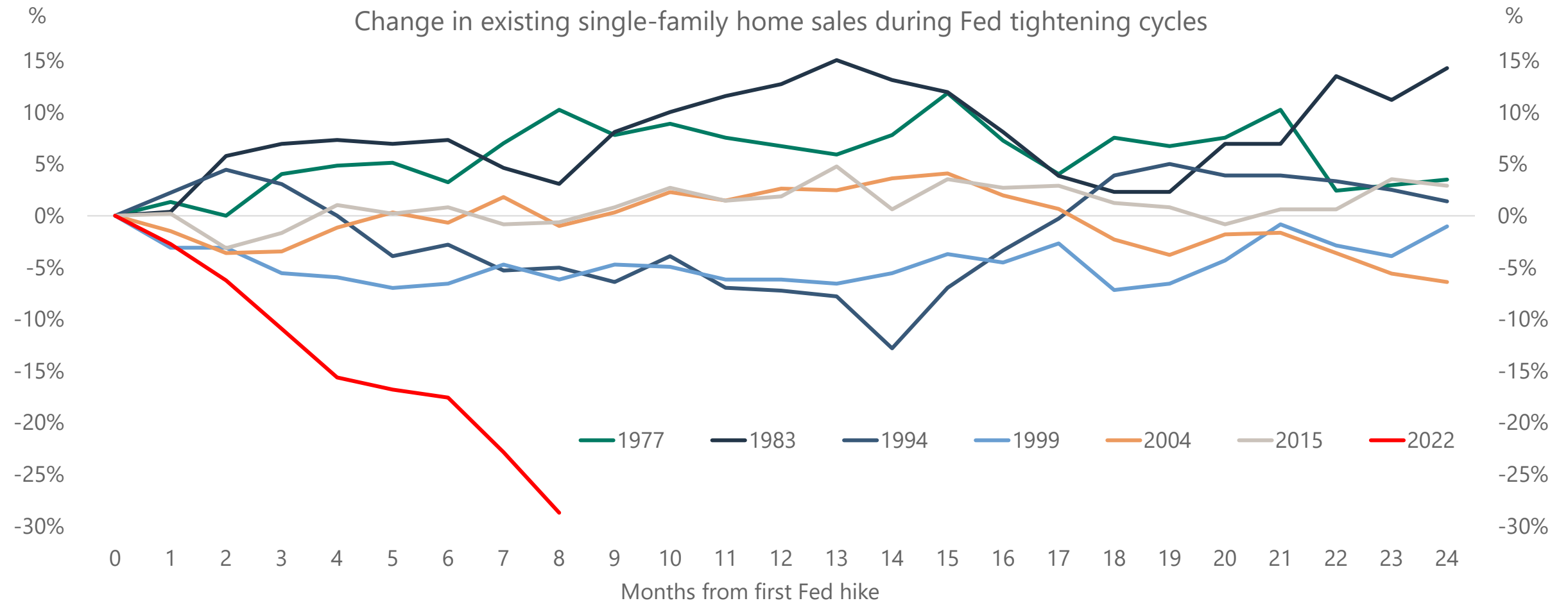
Consensus is forecasting a soft landing in home sales

SAAR, thous.



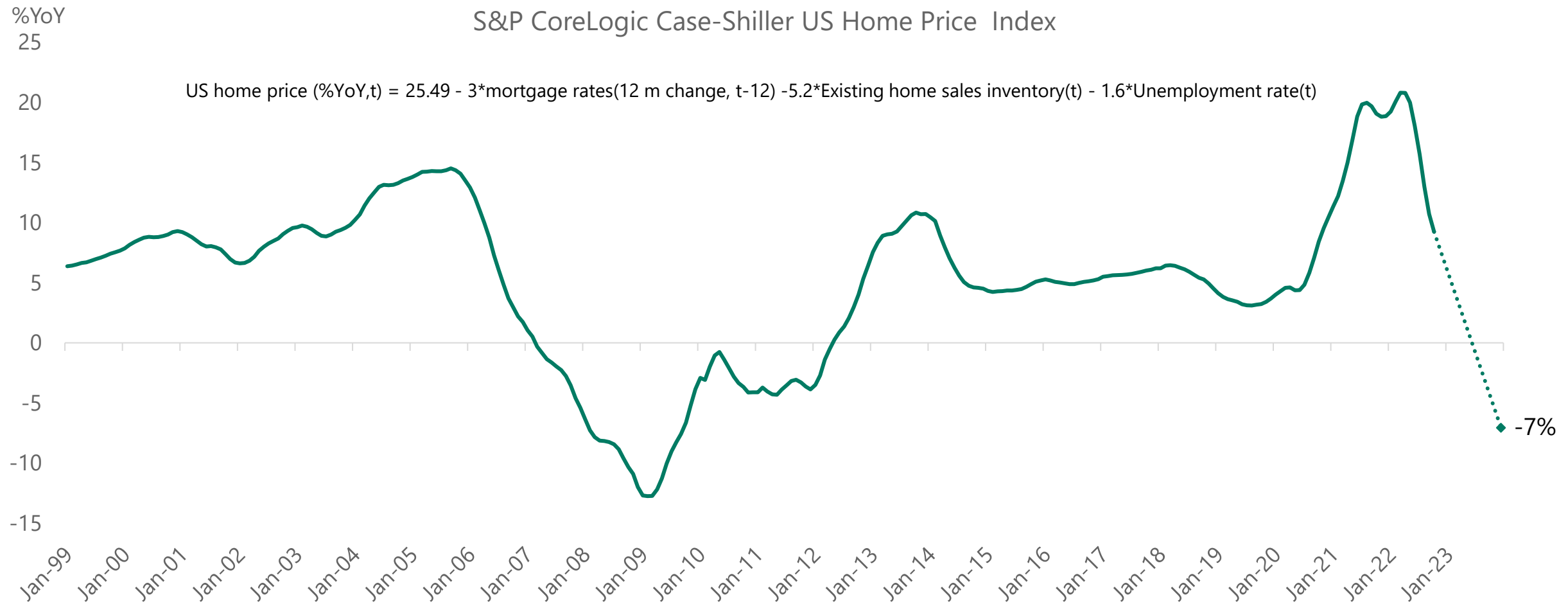
Source: Census Bureau, NAR, Haver, Apollo Chief Economist; Forecast is Bloomberg consensus

This is the fastest housing slowdown on record



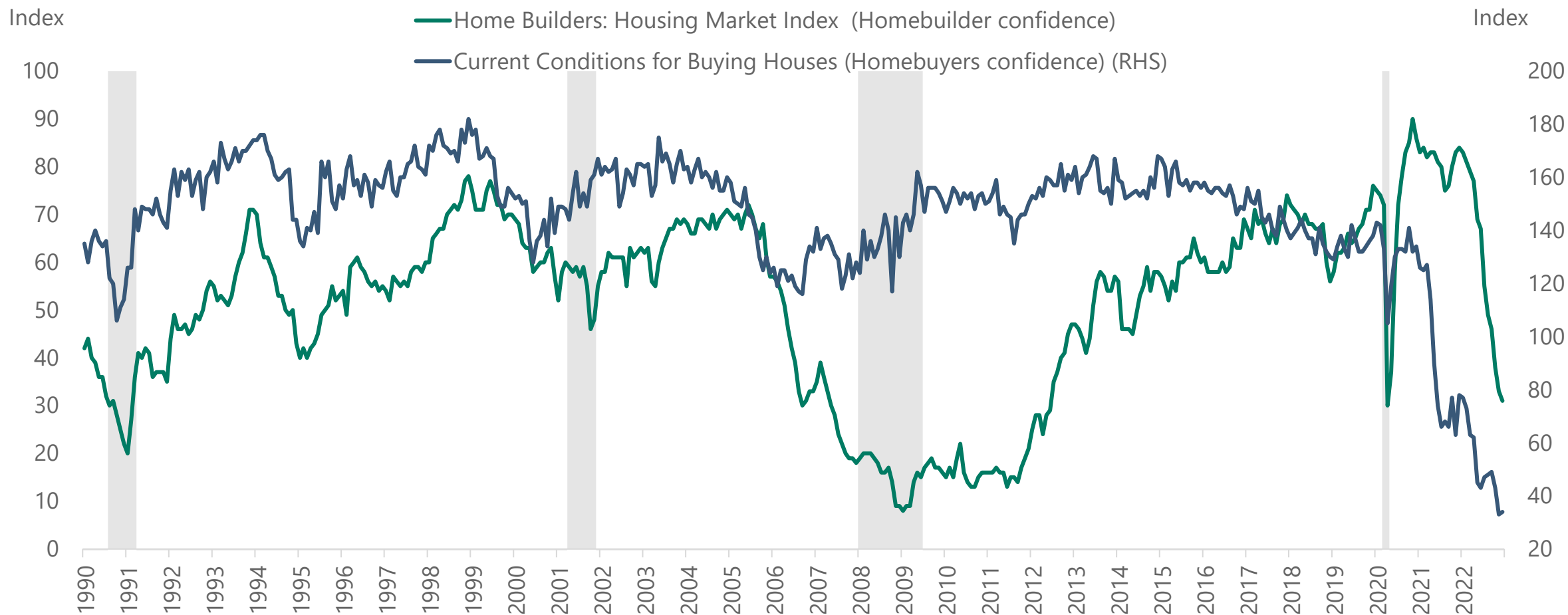
US house price model

US house price model

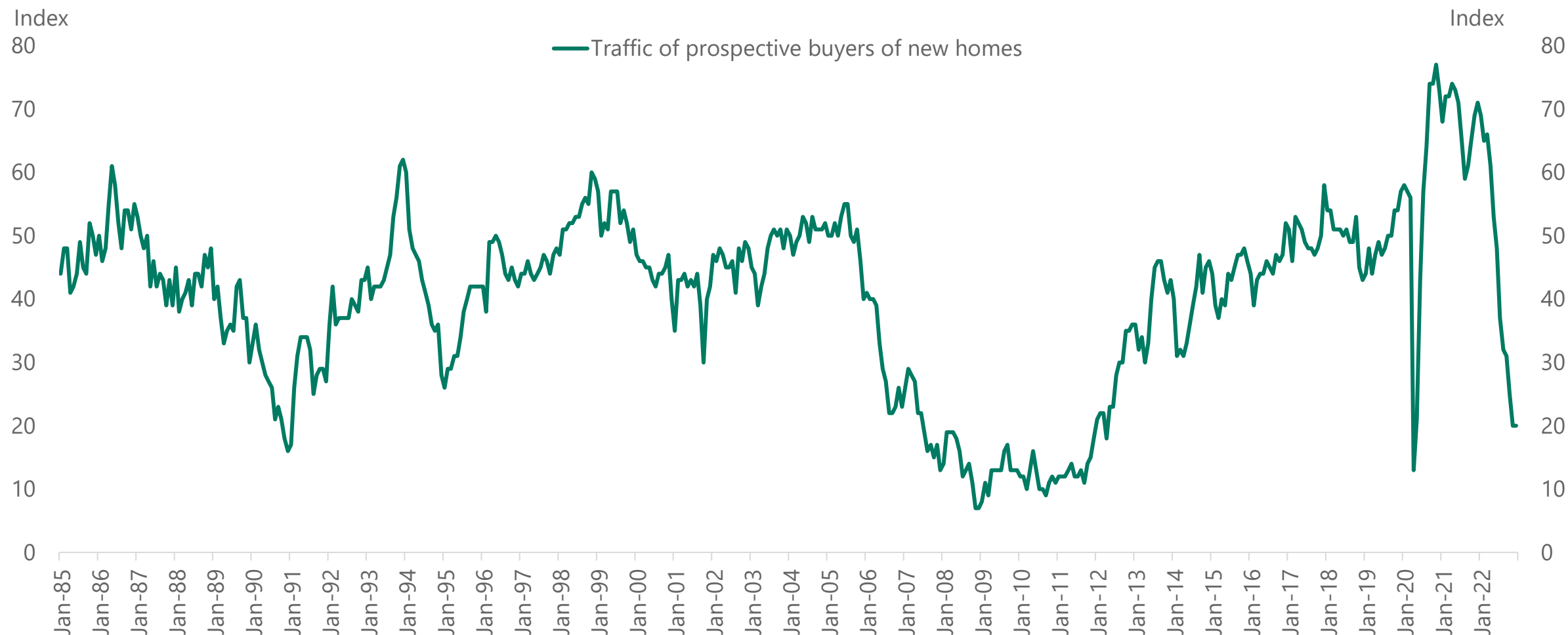


1) Housing Demand: Higher mortgage rates and high home prices slowing demand

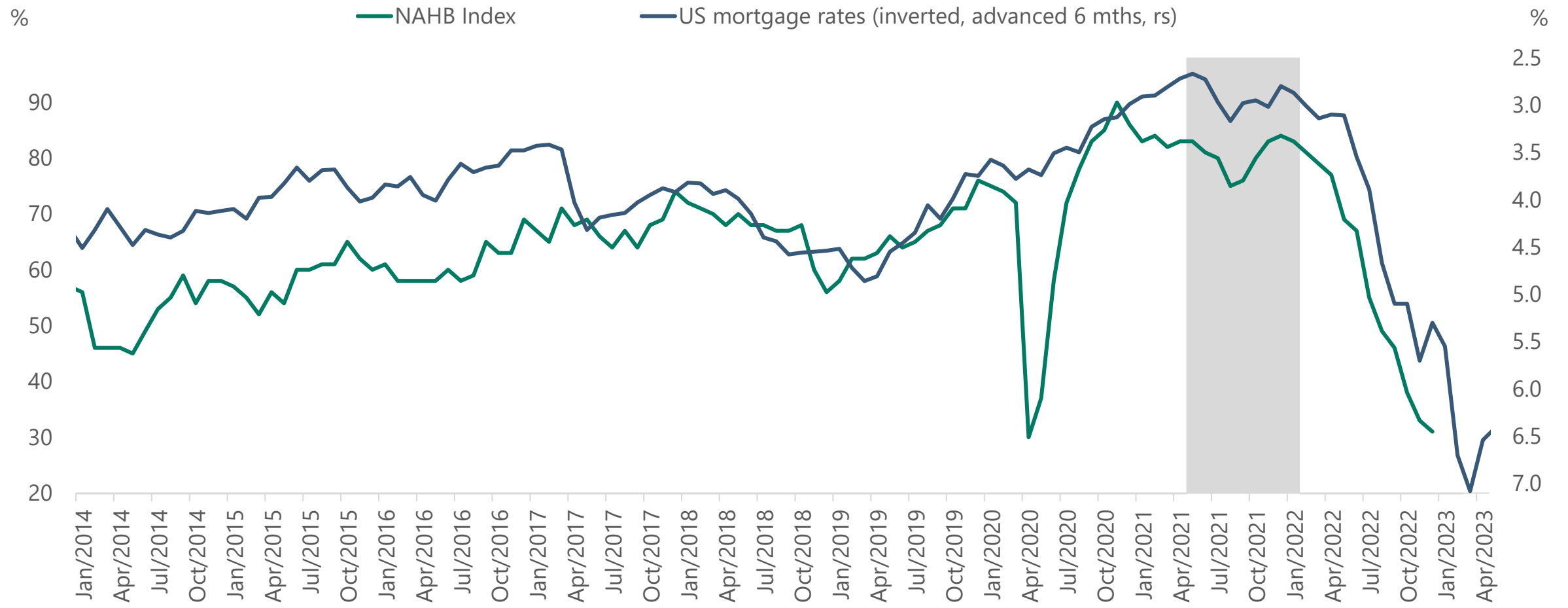
Confidence declining for homebuyers and homebuilders



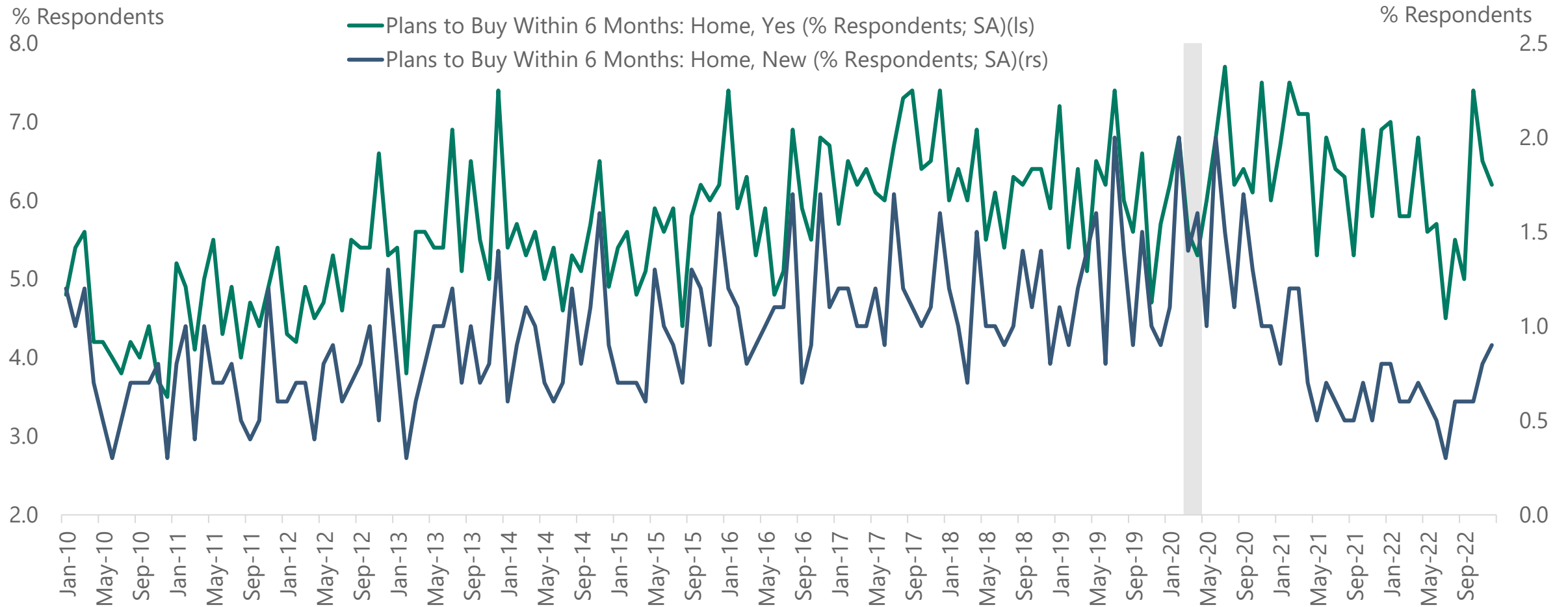
Higher interest rates have weakened demand for new homes



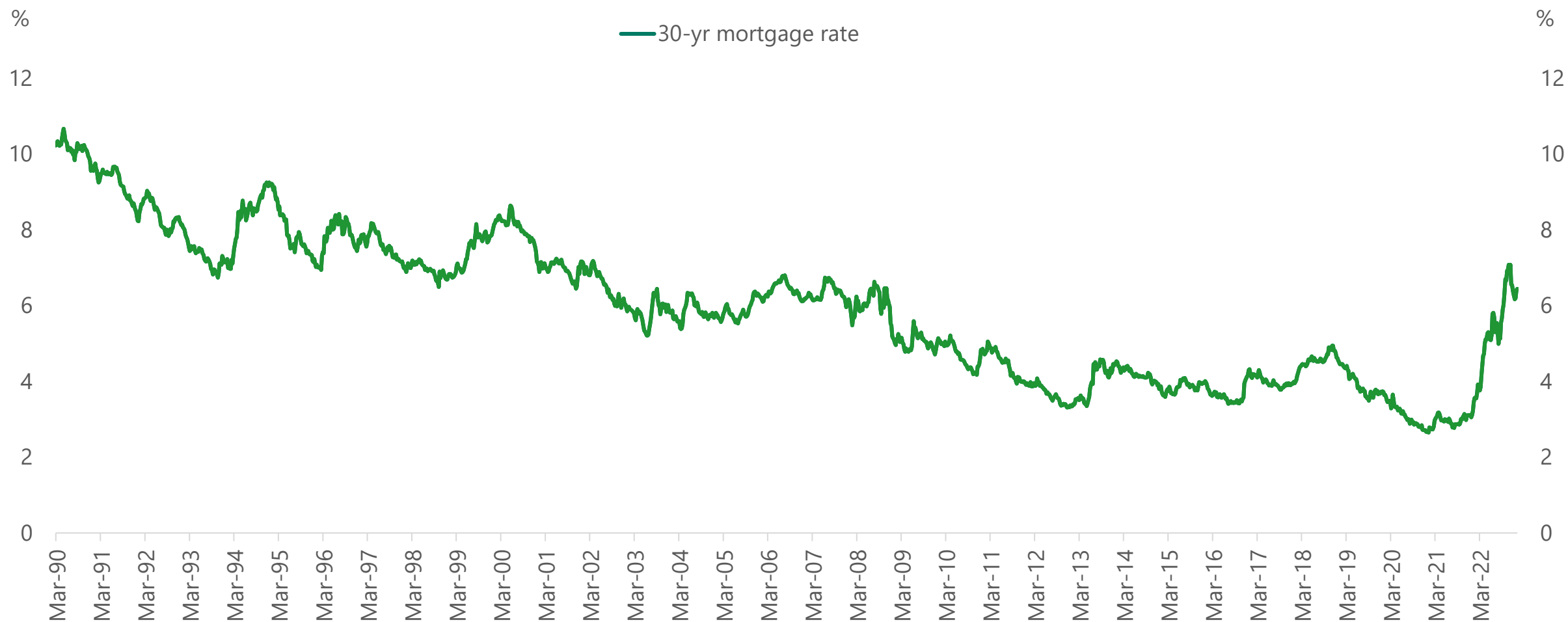
Homebuilder confidence could rebound over the coming months because of lower mortgage rates



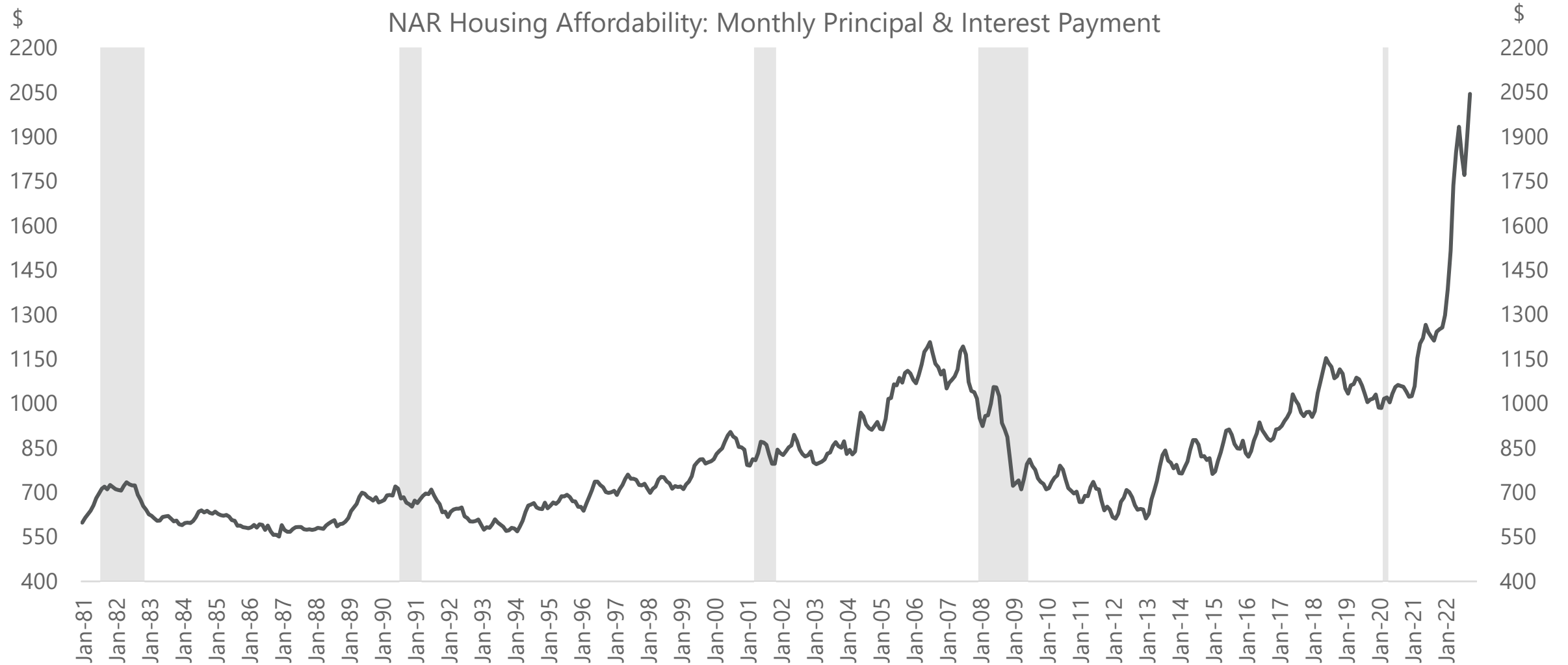
Plans to buy a home rebounding for new homes



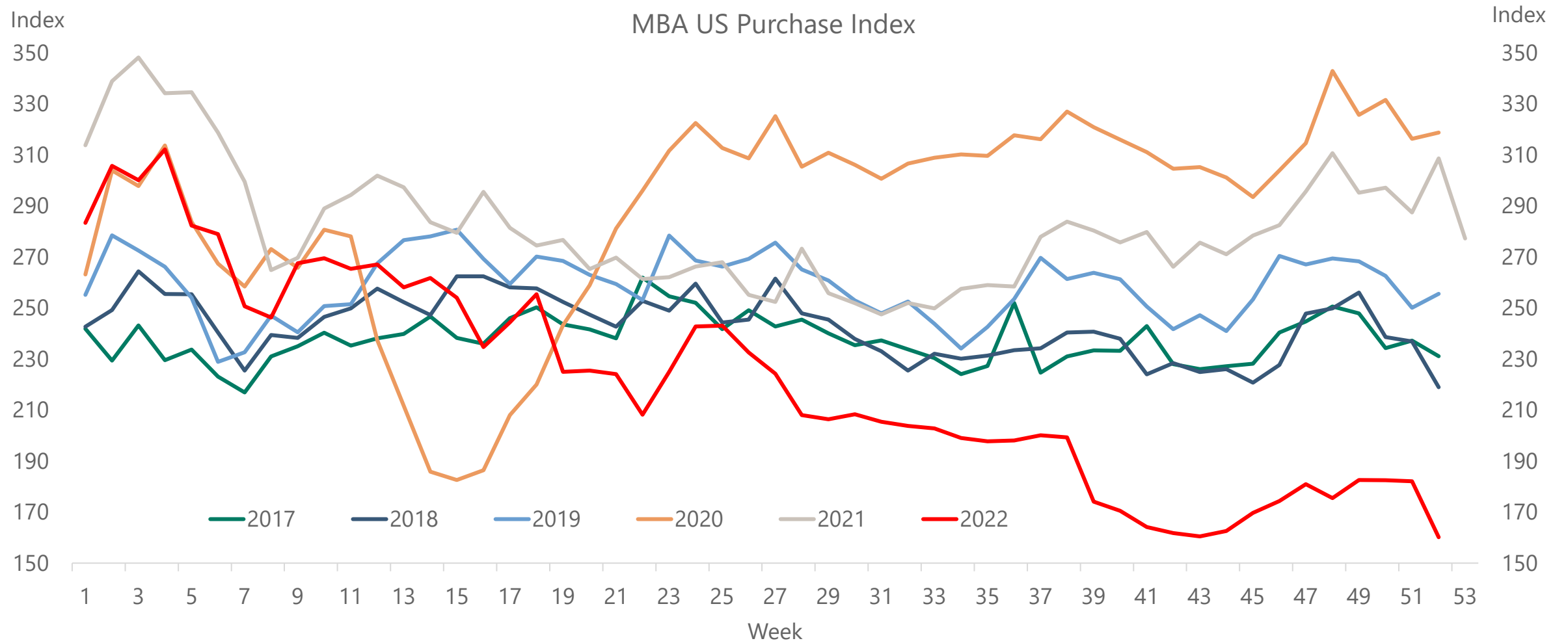
Mortgage rates coming down from recent peak



Monthly mortgage payments rising



Mortgage purchase applications are low

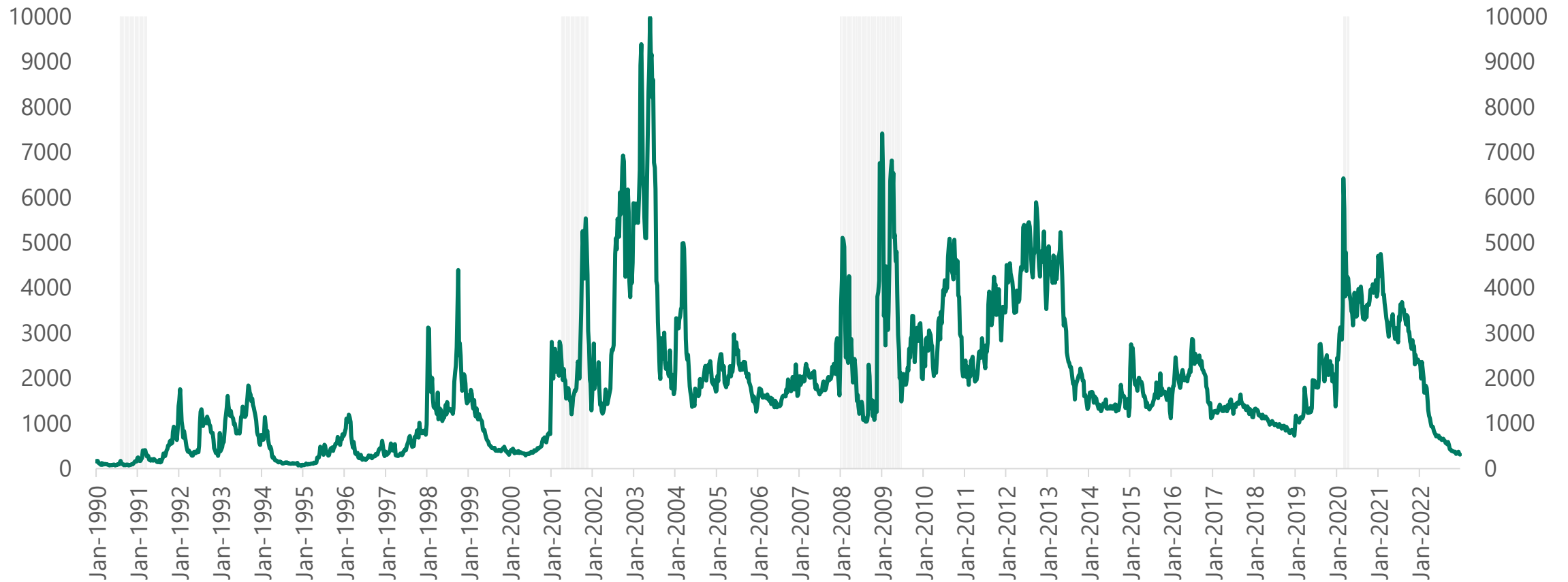


Mortgage refi applications very low

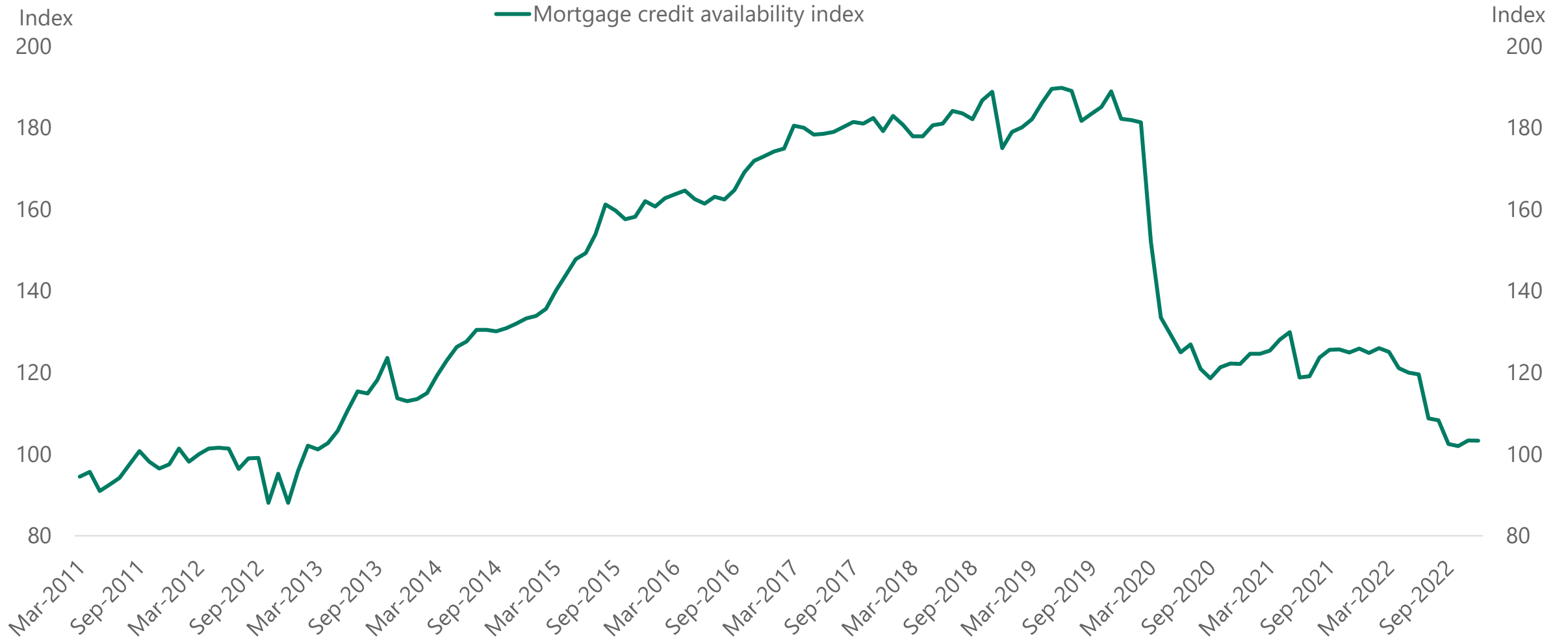
Index, Mar 1990 = 100

— Mortgage loan applications for refinancing

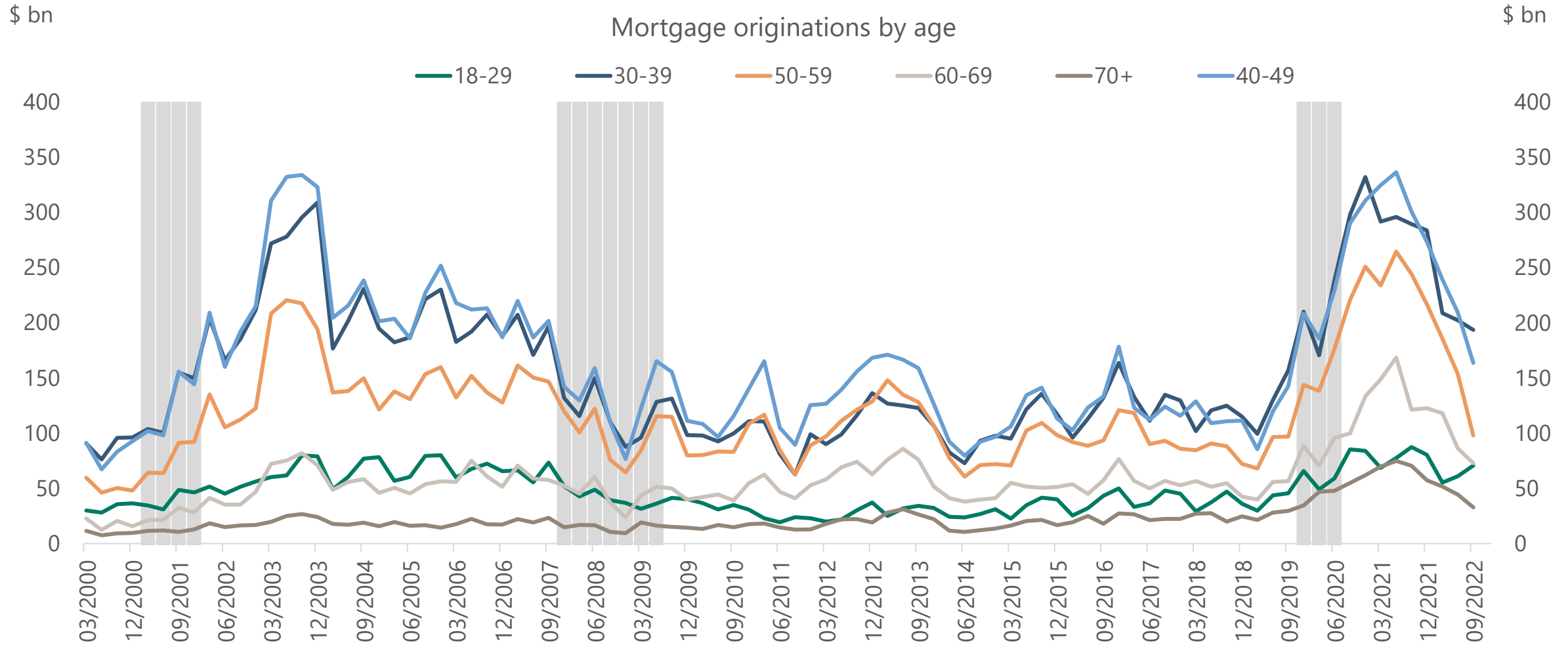
Index, Mar 1990 = 100



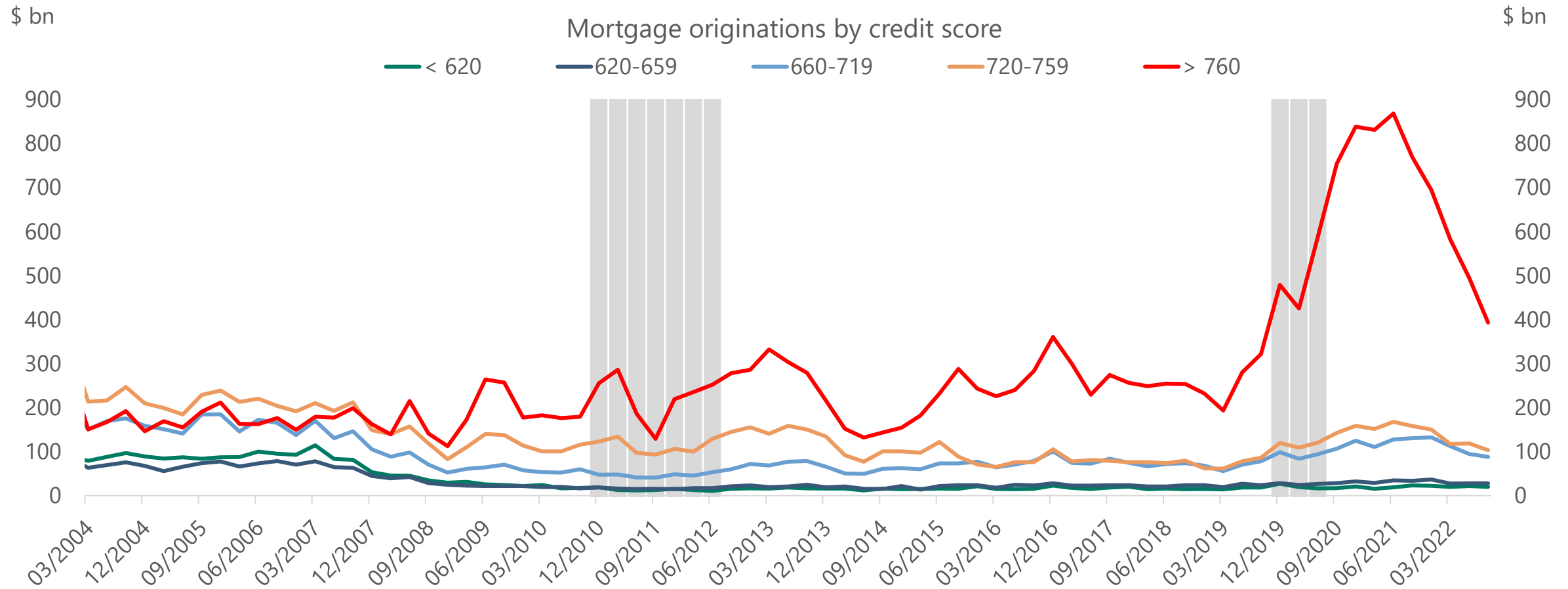
Availability of mortgage credit continues to tighten



Mortgage originations coming down to pre-pandemic levels



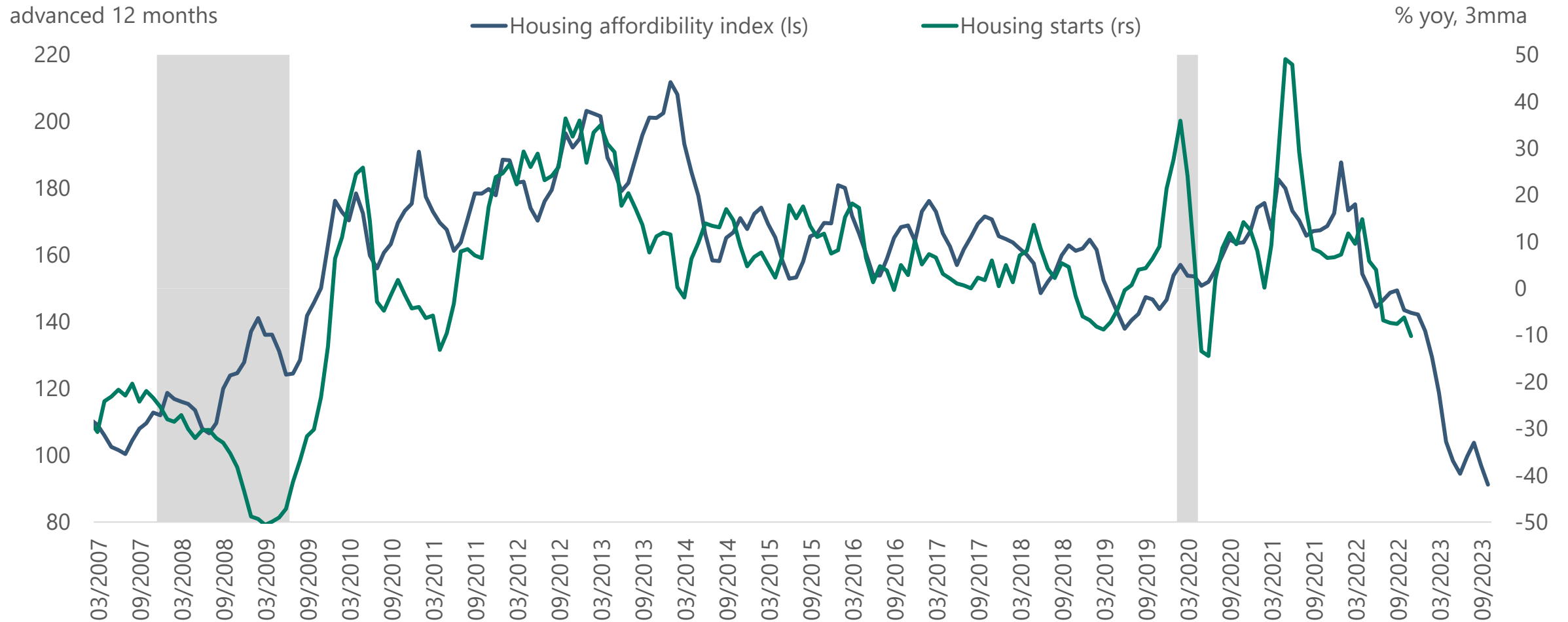
Mortgage originations normalizing for households with high credit scores



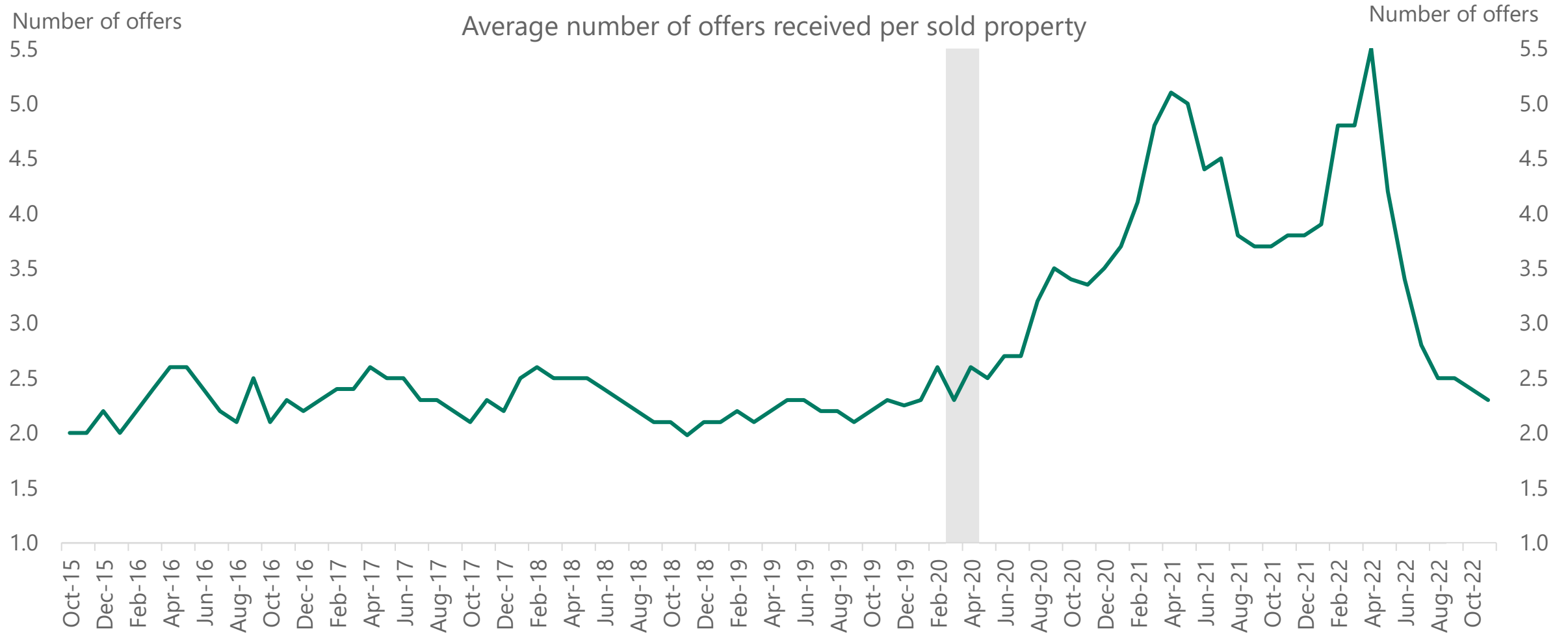
Housing affordability now below 2007 levels



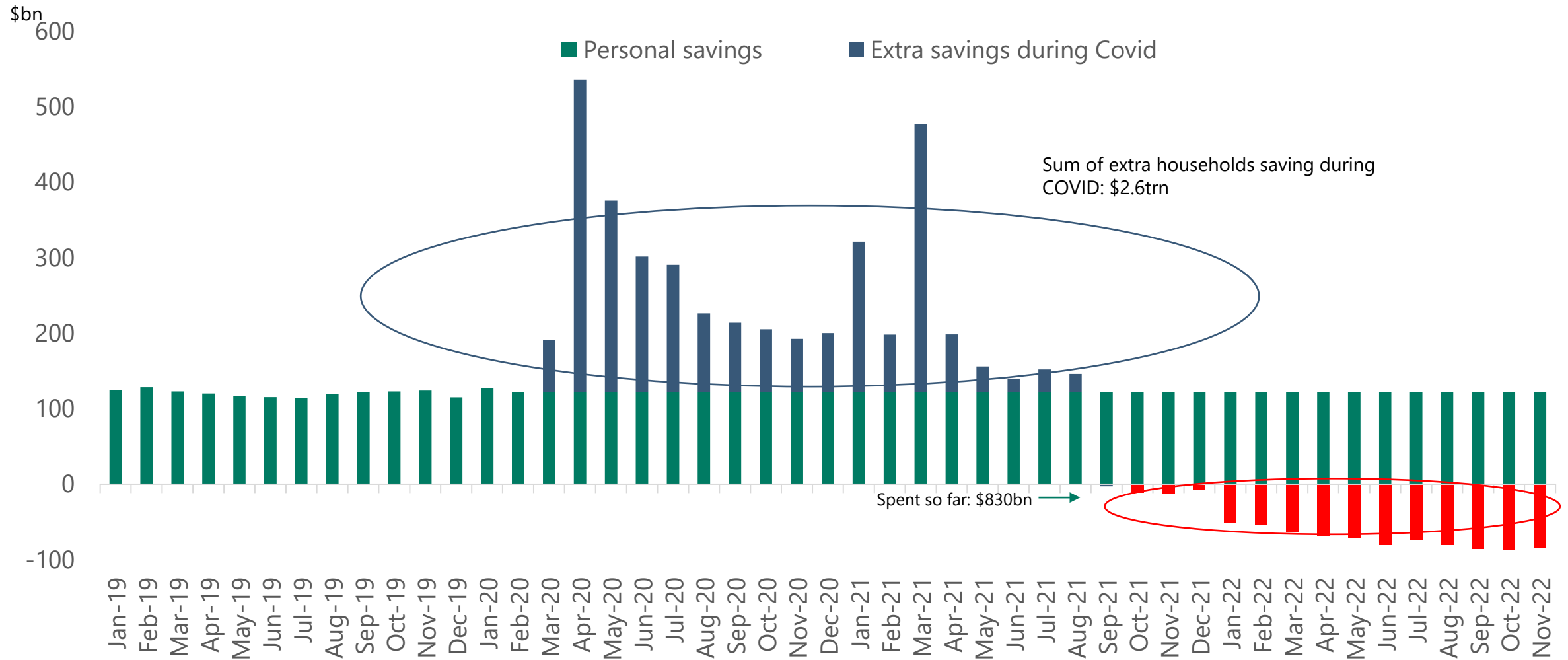
Housing starts likely to moderate further



Average number of offers received per sold property



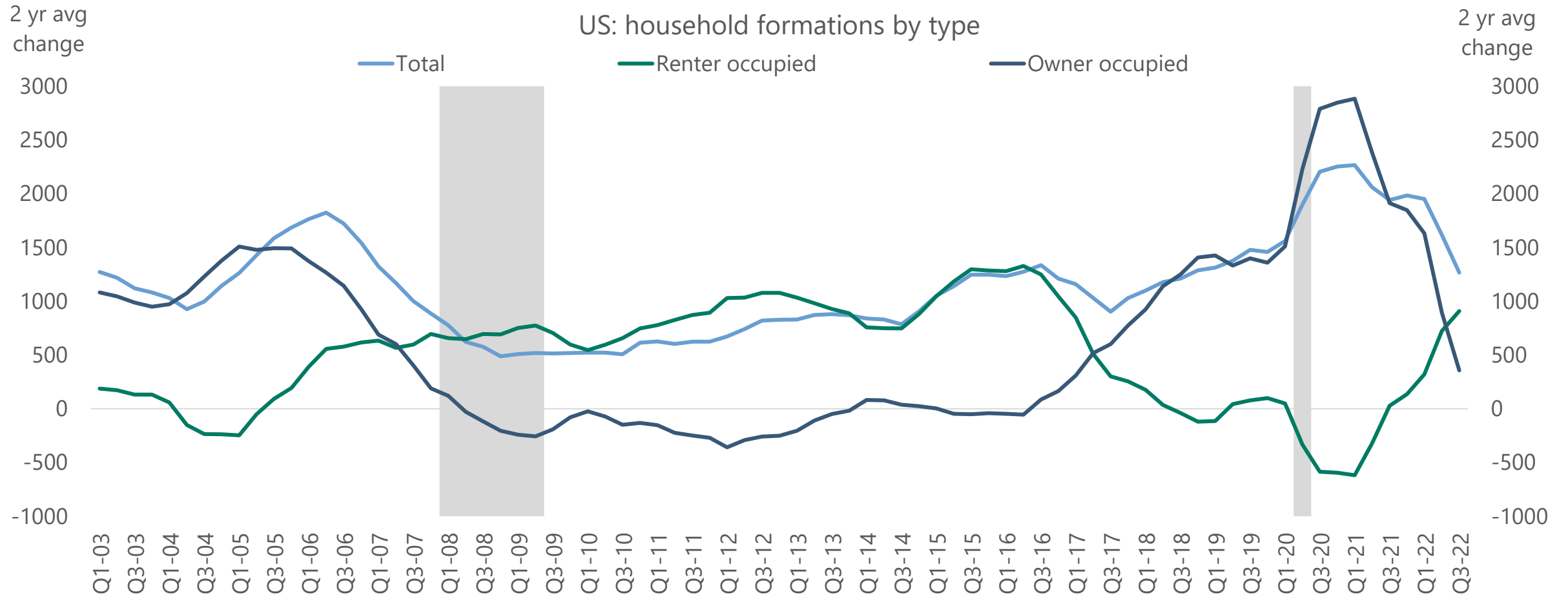
Households have \$1.8trn in excess dry powder, saved during the pandemic



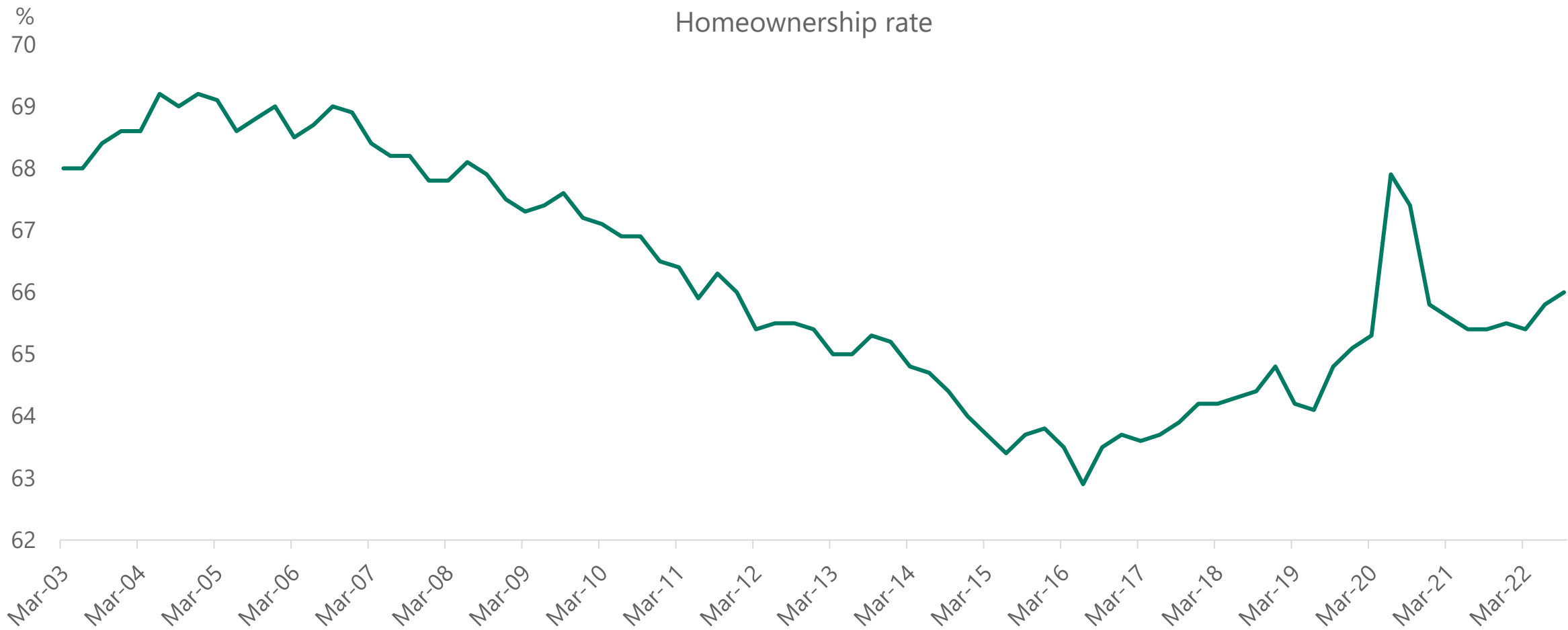
Demographics are a tailwind to housing demand



Household formation returning to normal



Homeownership rate moving gradually higher

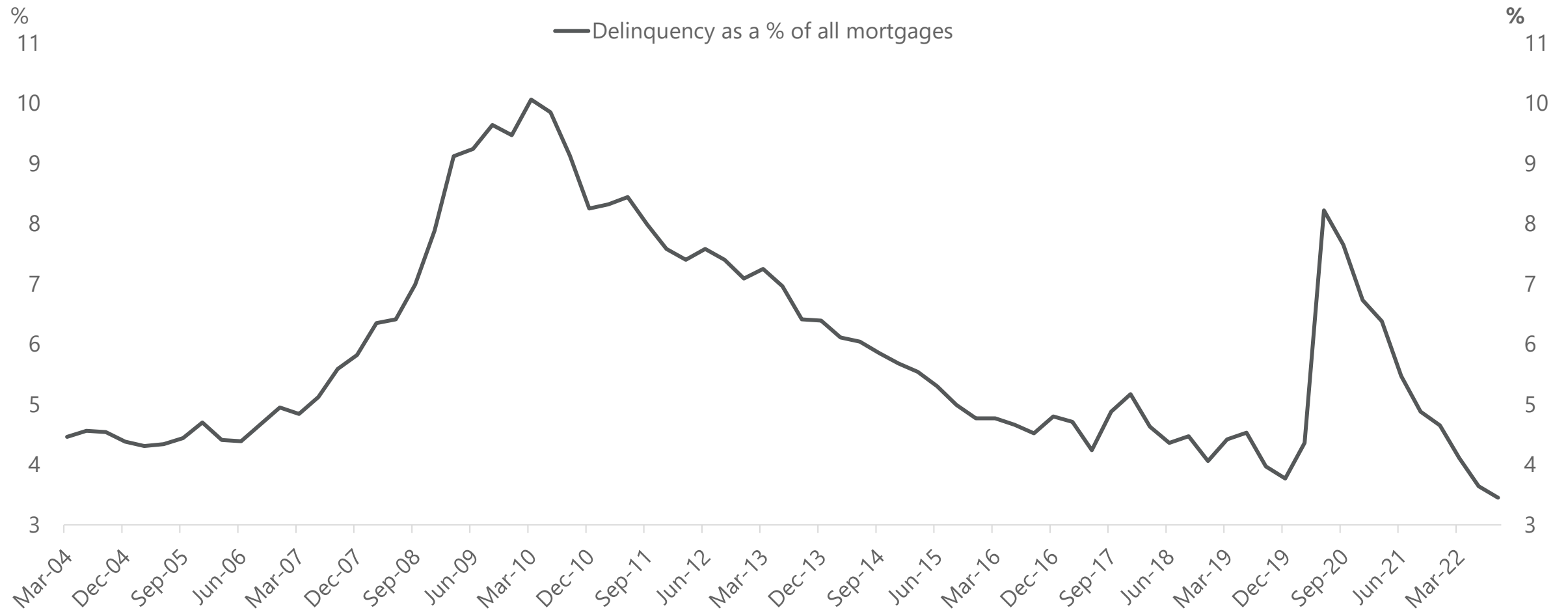


Source: Bloomberg, Apollo Chief Economist

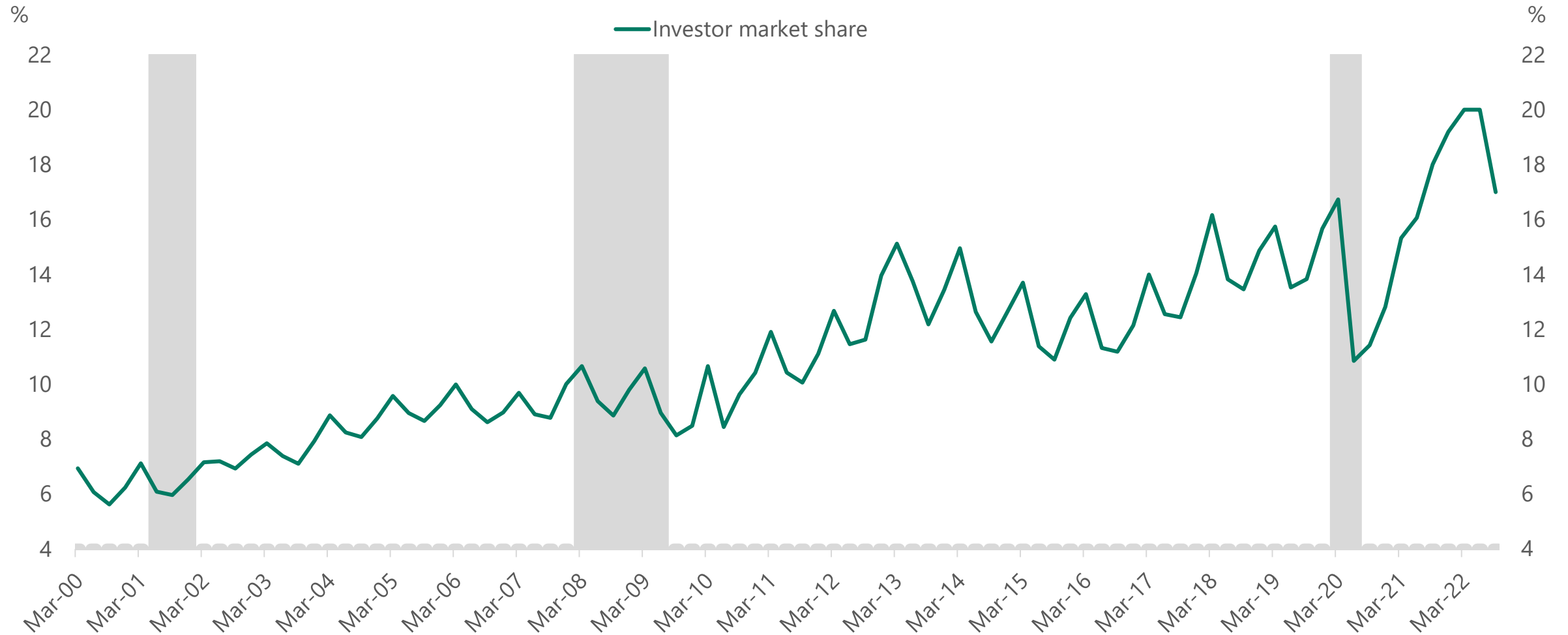
Low unemployment is a tailwind to housing demand



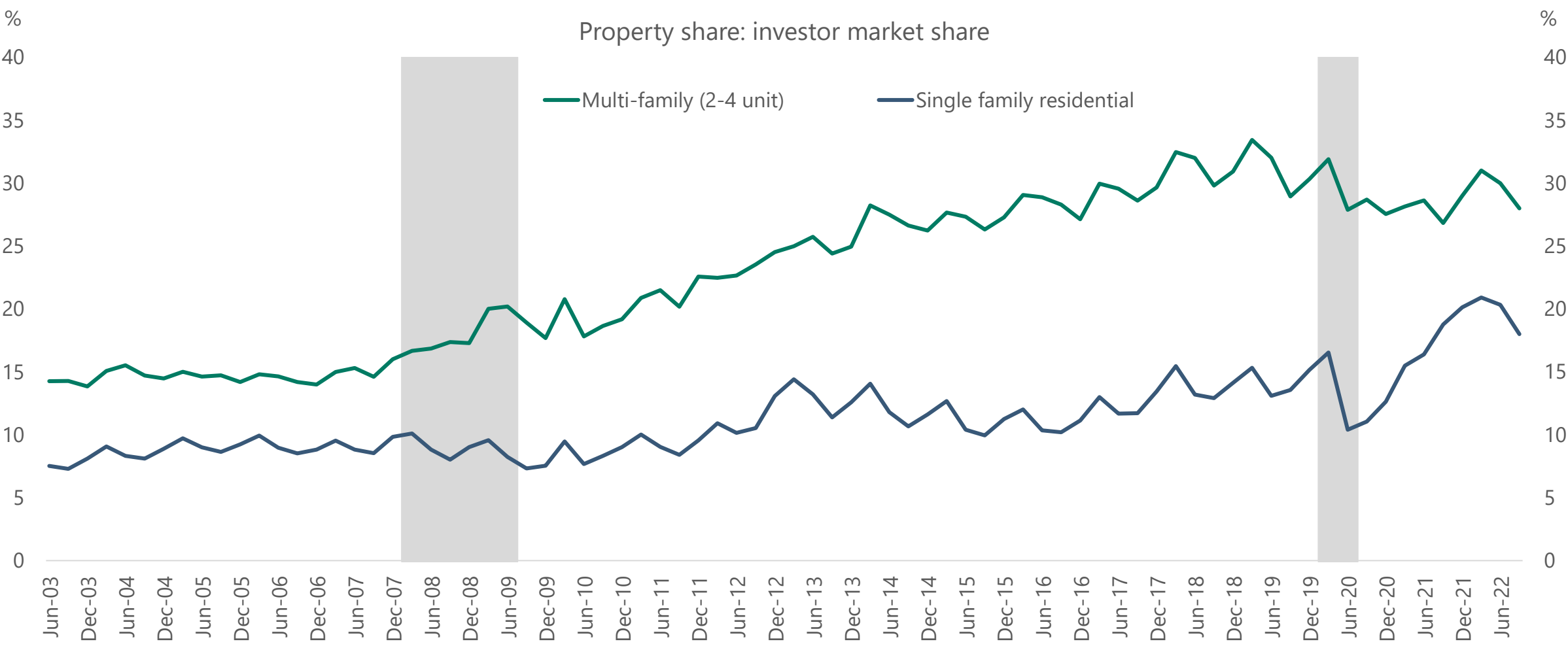
Delinquent mortgages still low



Investors accounting for 17% of all home purchases

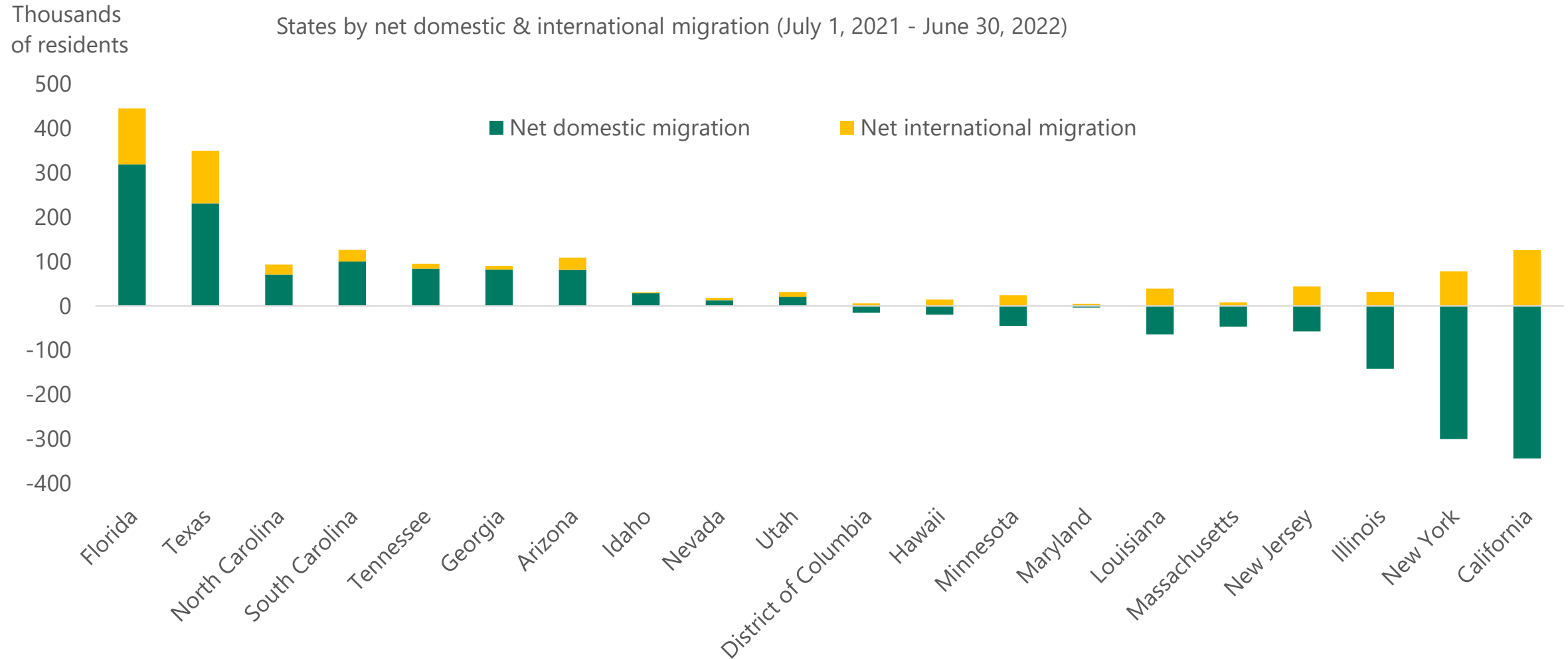


Investor share of homes sold



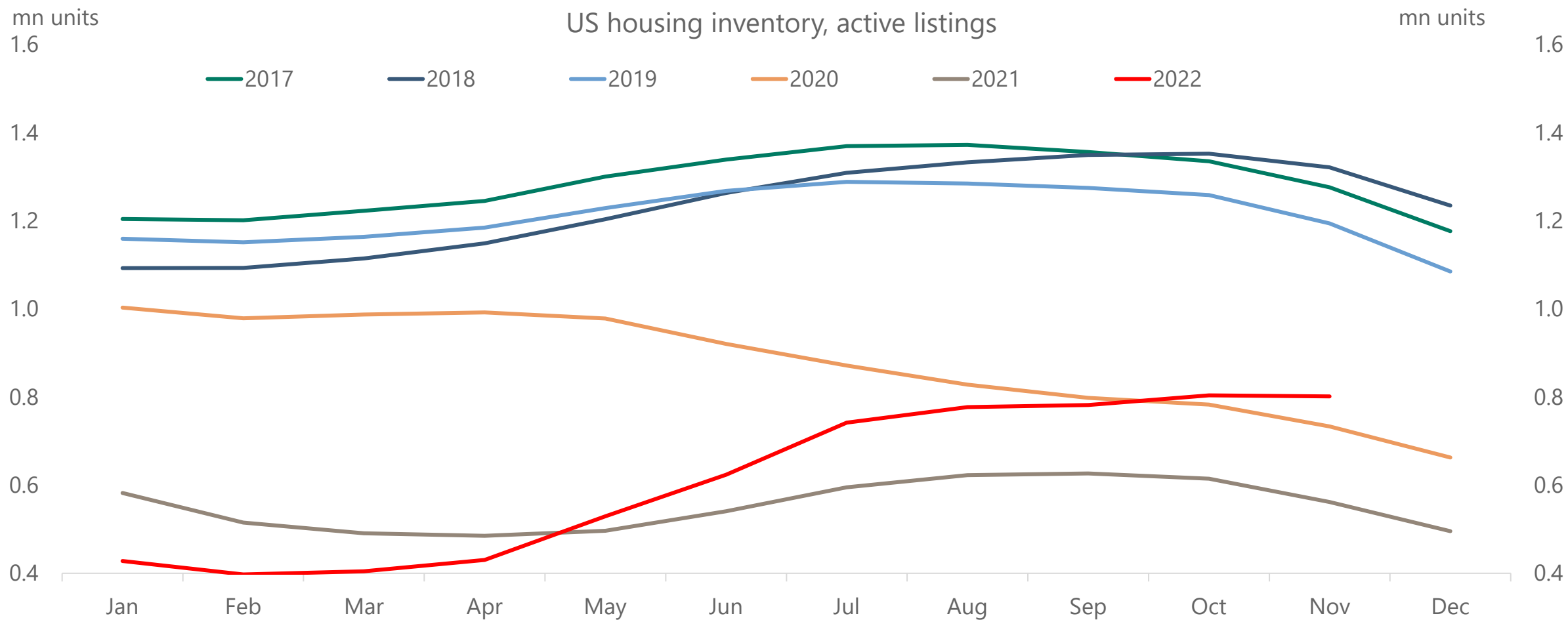
Source: Redfin, Apollo Chief Economist (Definition of Investor market share: the percentage of total home sales in which an investor was the buyer)

Migration out of California and migration into Florida during the pandemic

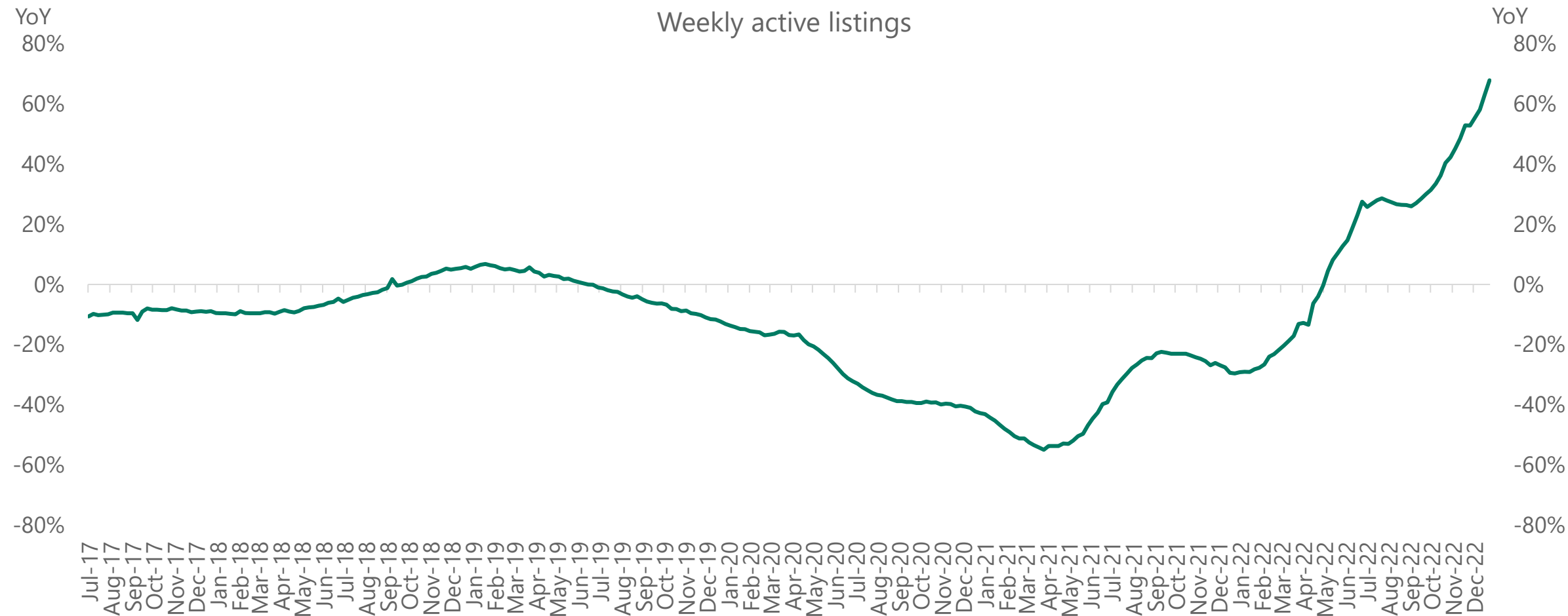


2) Housing Supply: Housing supply is low, construction near record-high levels

US housing inventory rising slowly from low levels

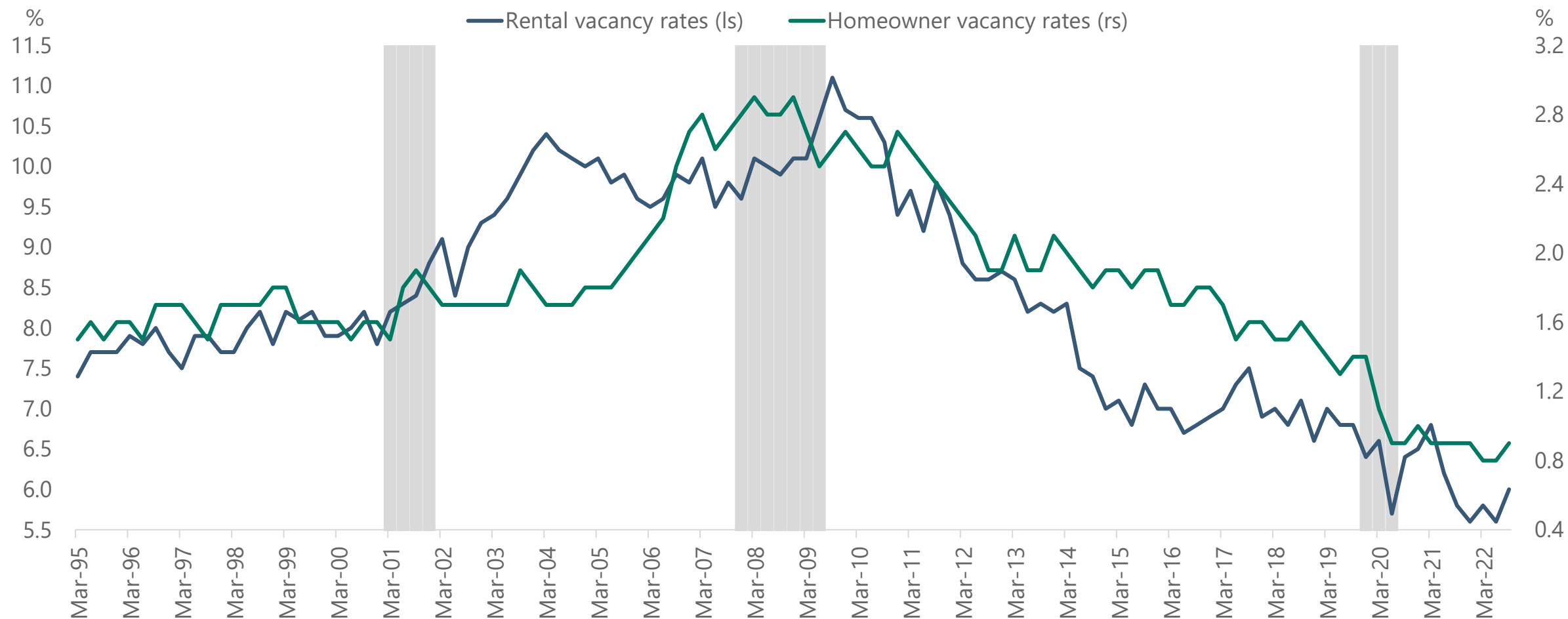


US housing inventory rising from low level

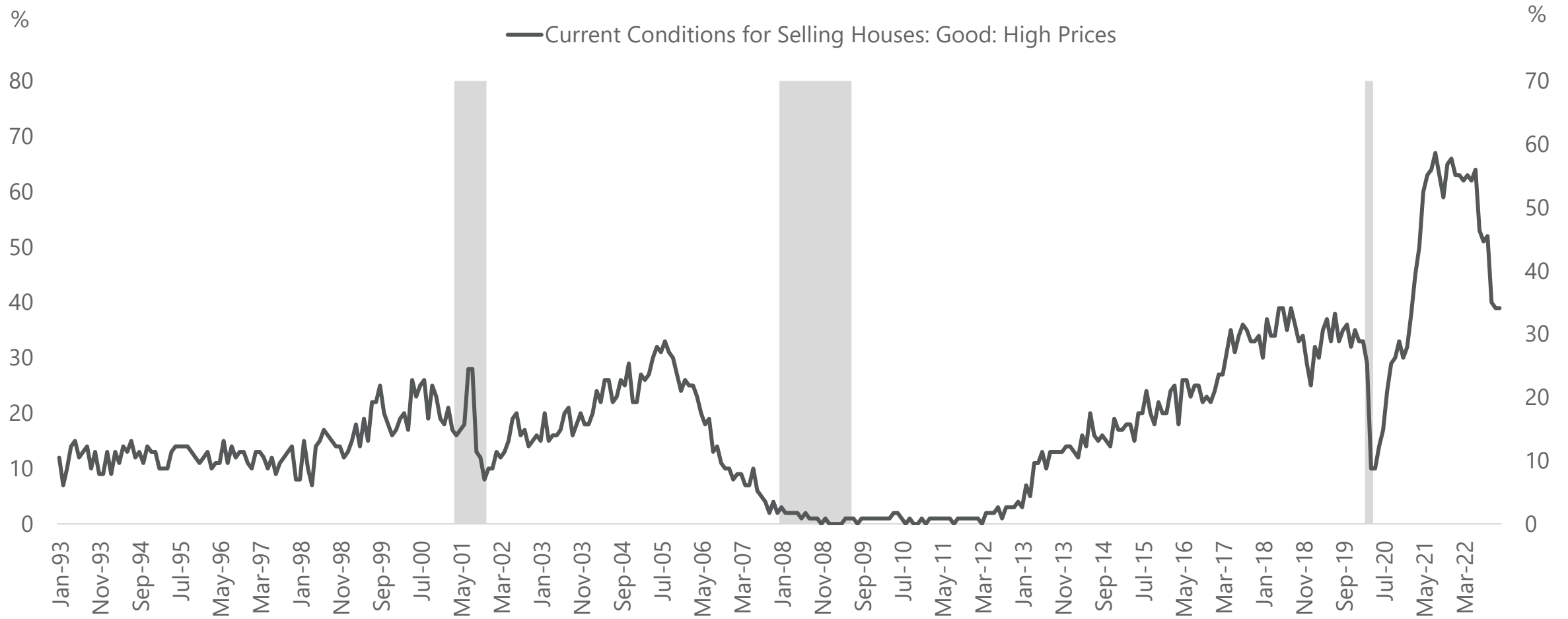


Source: Realtor.com, Apollo Chief Economist

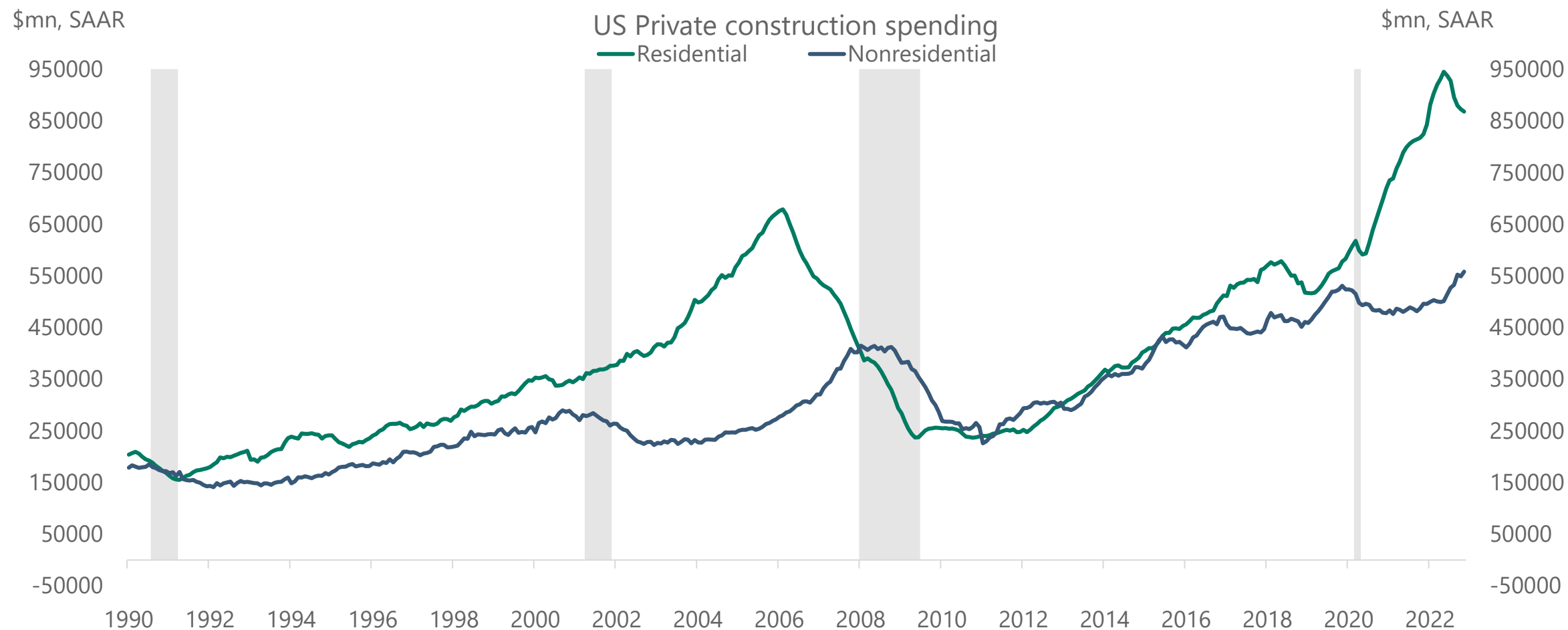
Vacancy rates at record-low levels



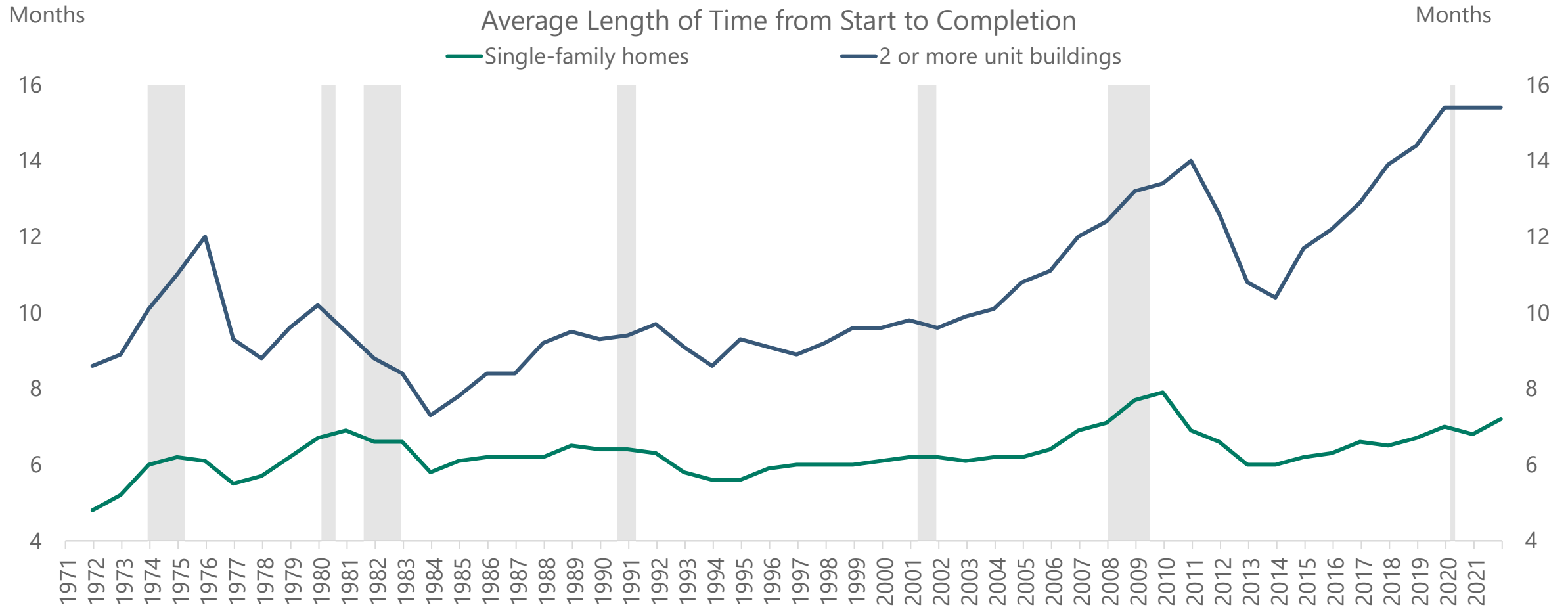
Consumers saying “This is a good time to sell a house” coming down



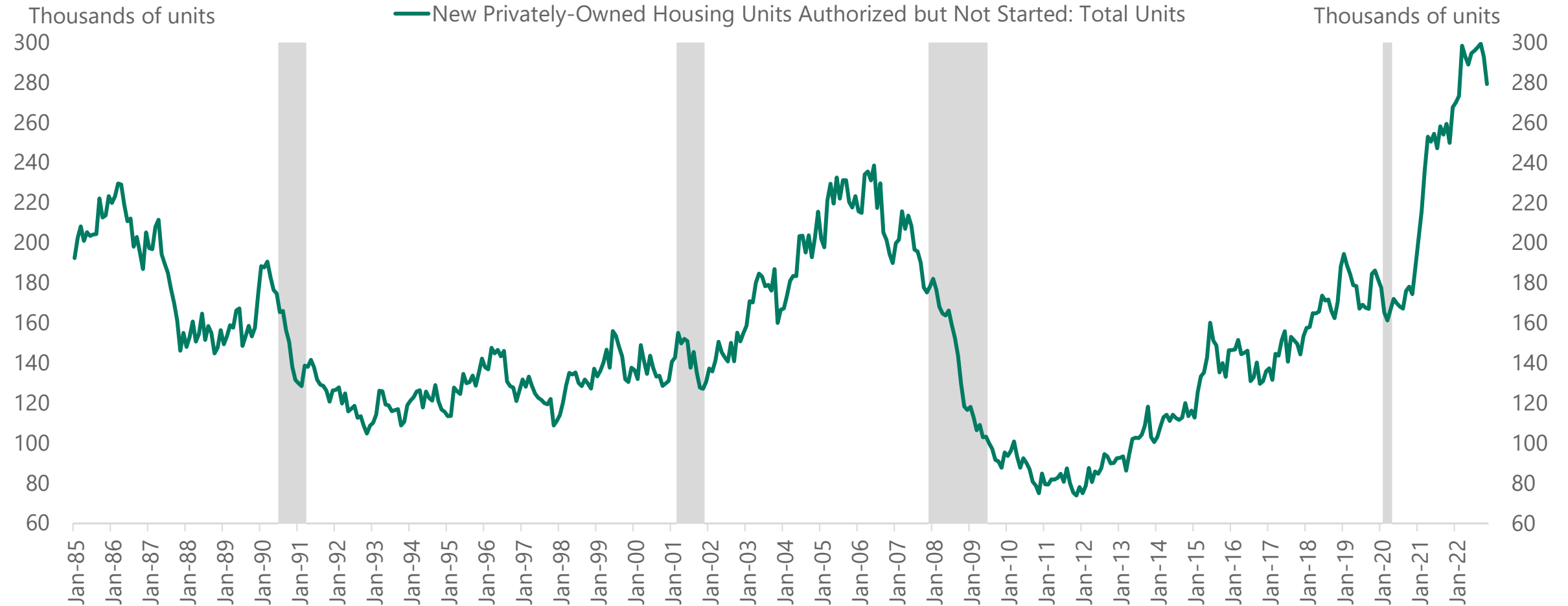
Residential construction spending declining but still very strong



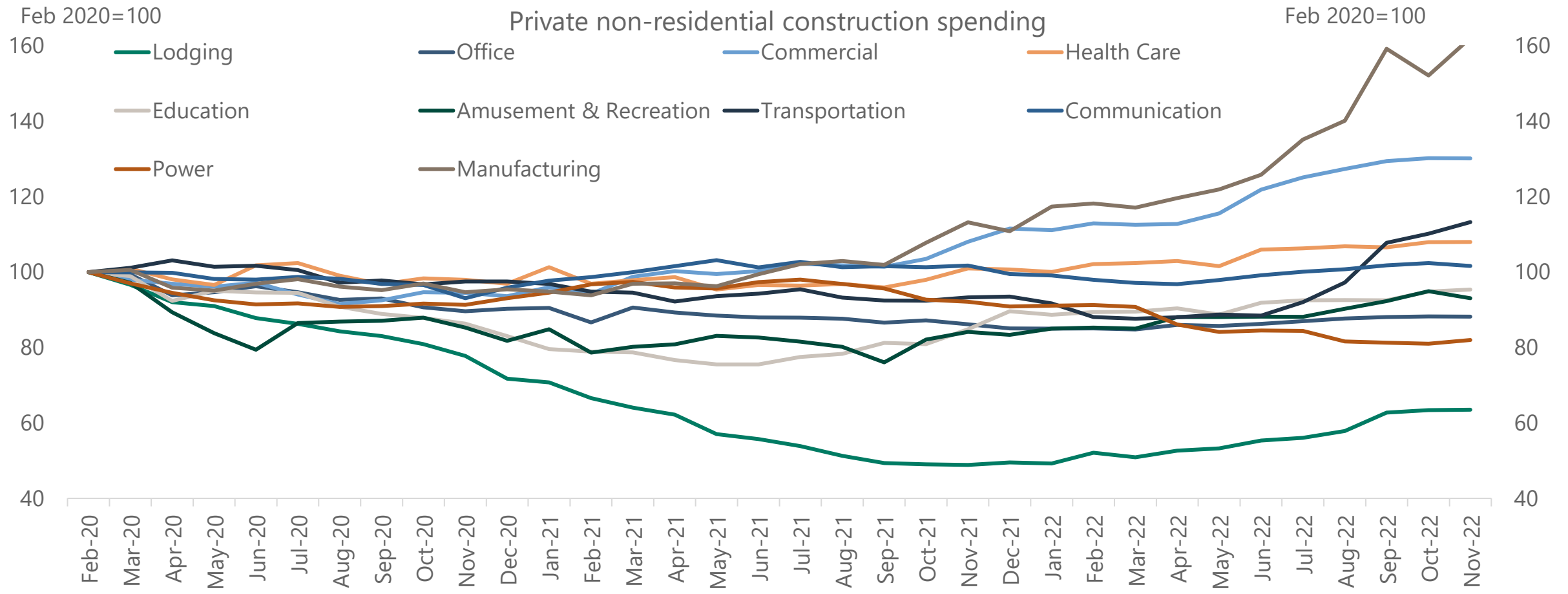
It currently takes 7 months on average to build a single-family house



New housing units authorized

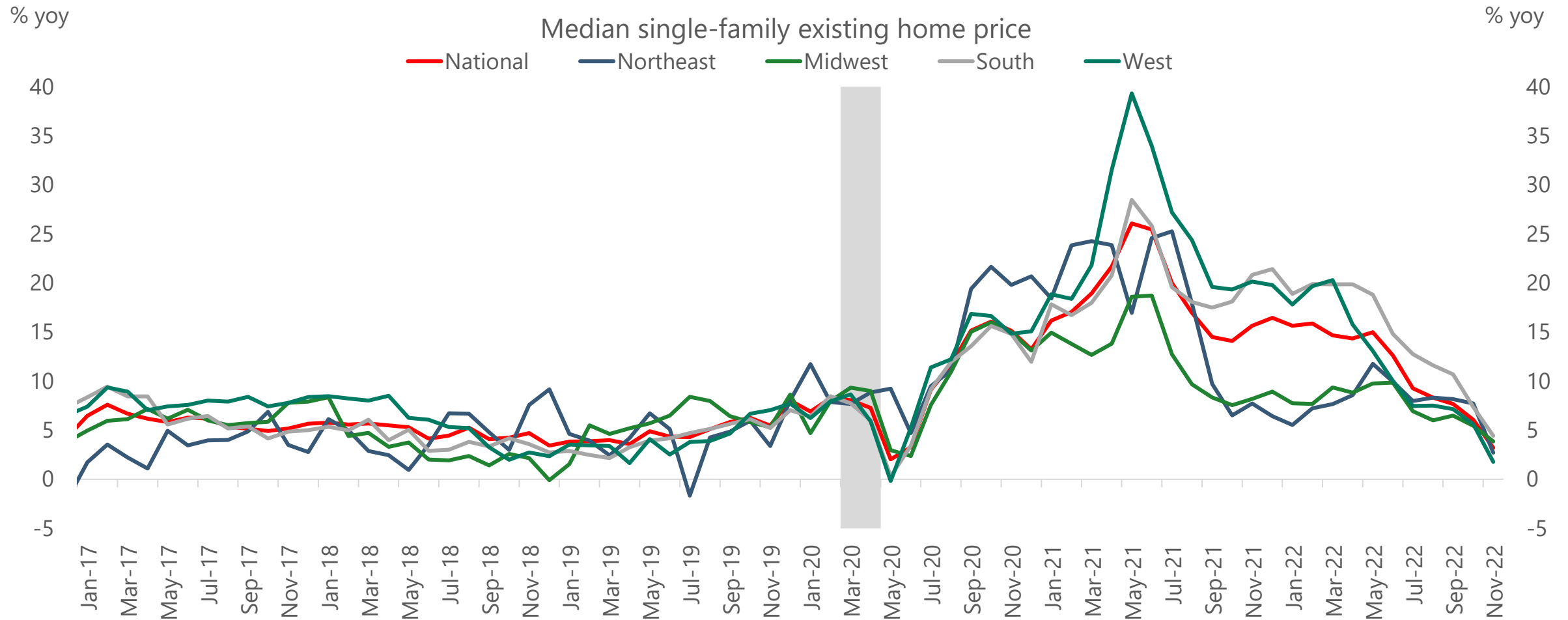


Lodging has seen the biggest decline in non-residential construction

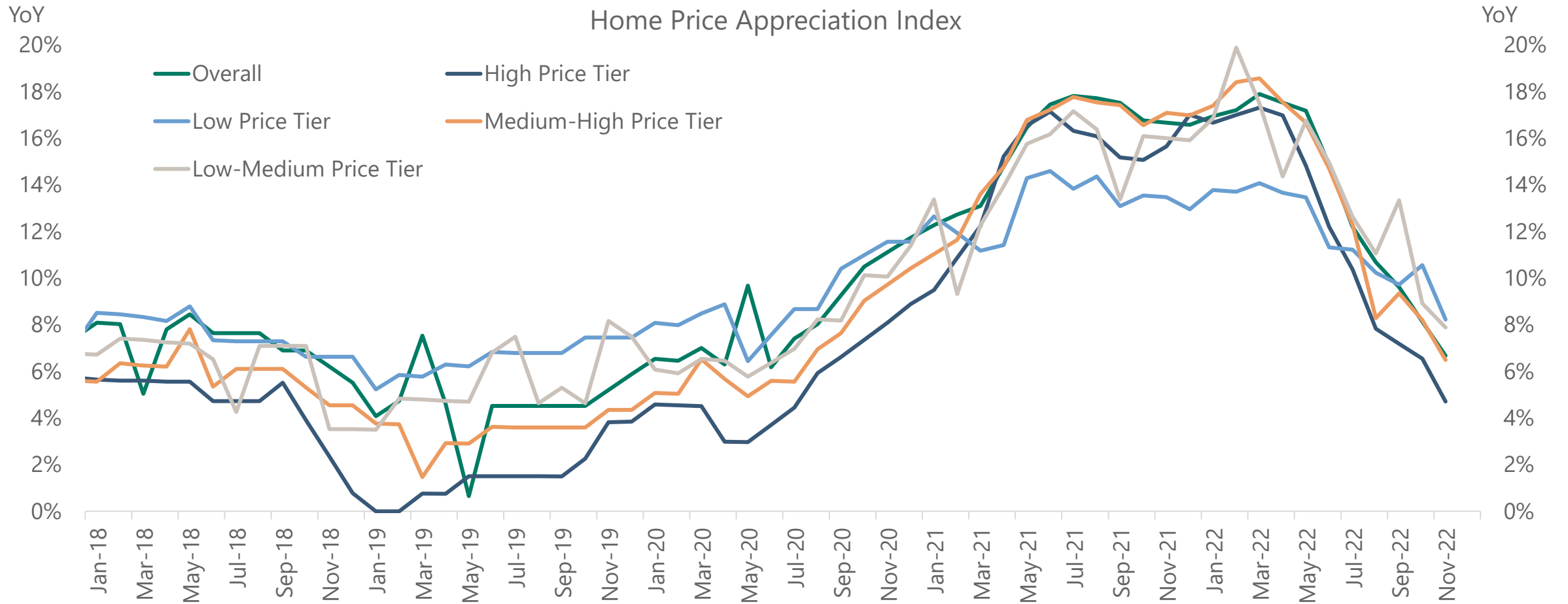


3) House Prices: Home price
inflation slowing down

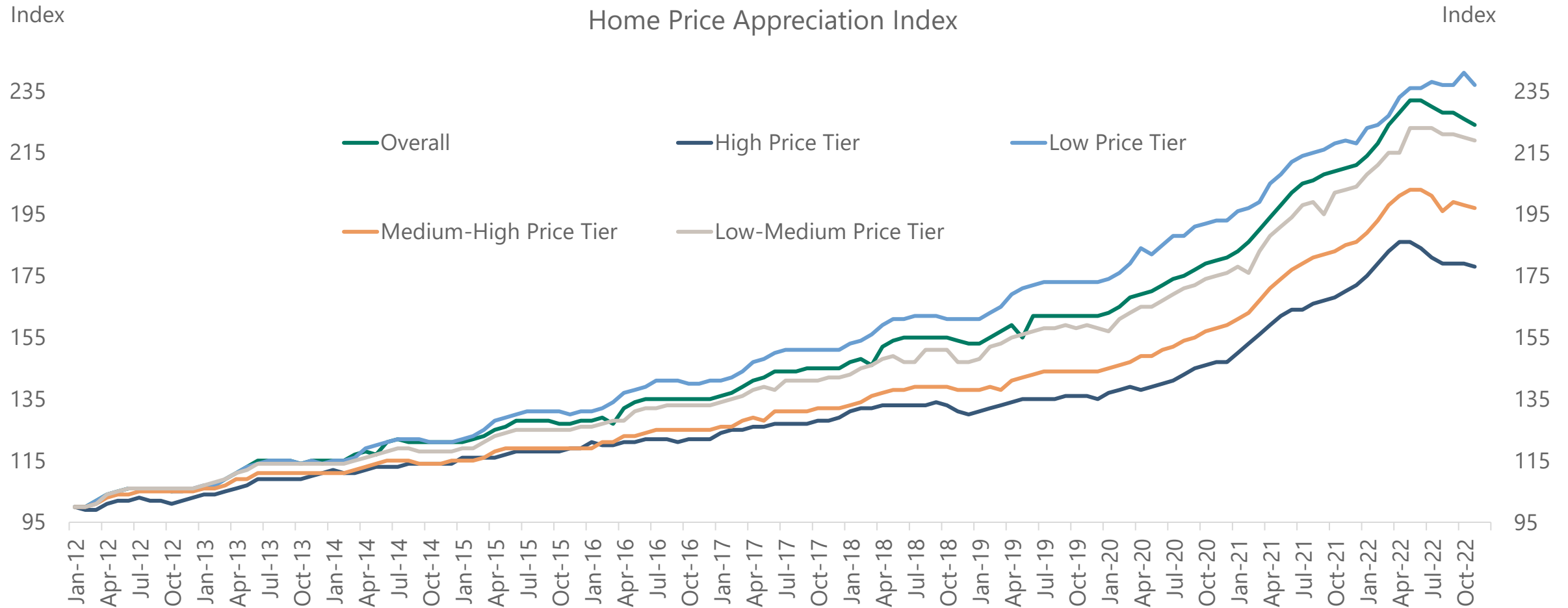
Home price inflation coming down



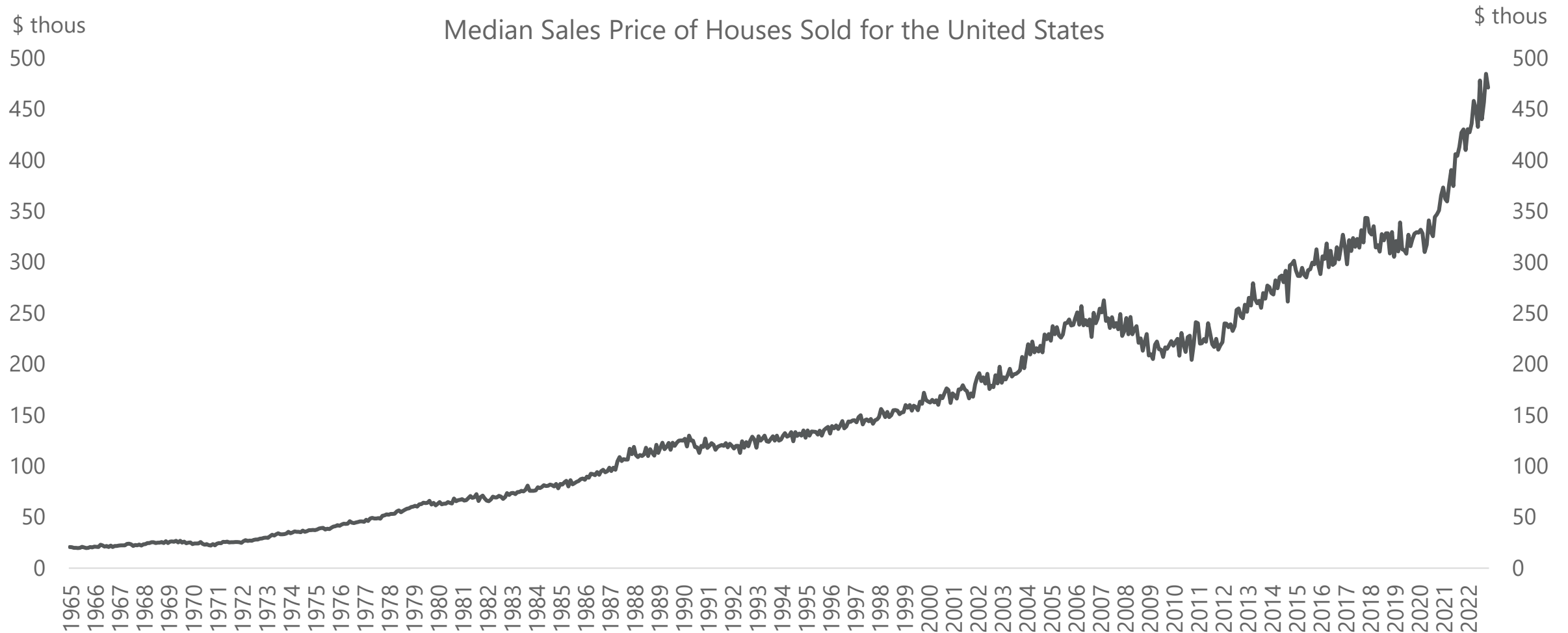
House price inflation slowing across price tiers



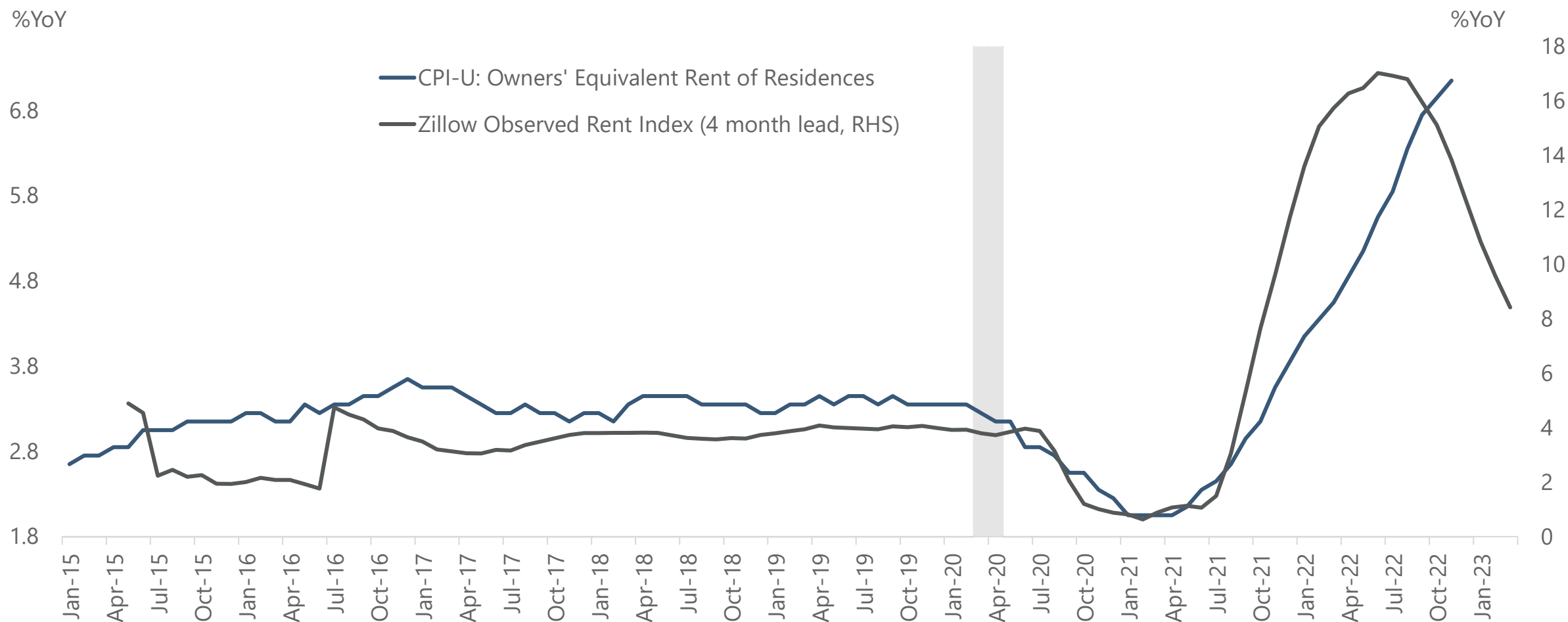
House price inflation slowing across price tiers



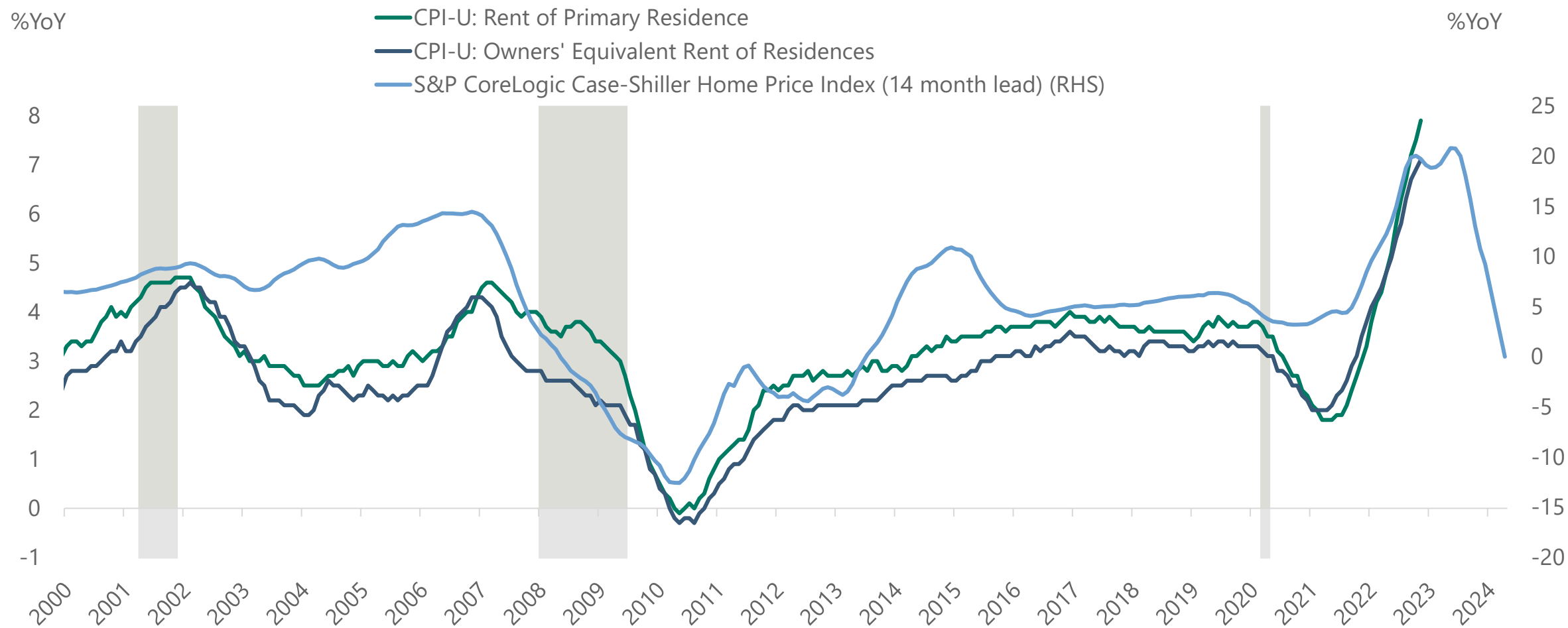
Median home sales price now around \$471K



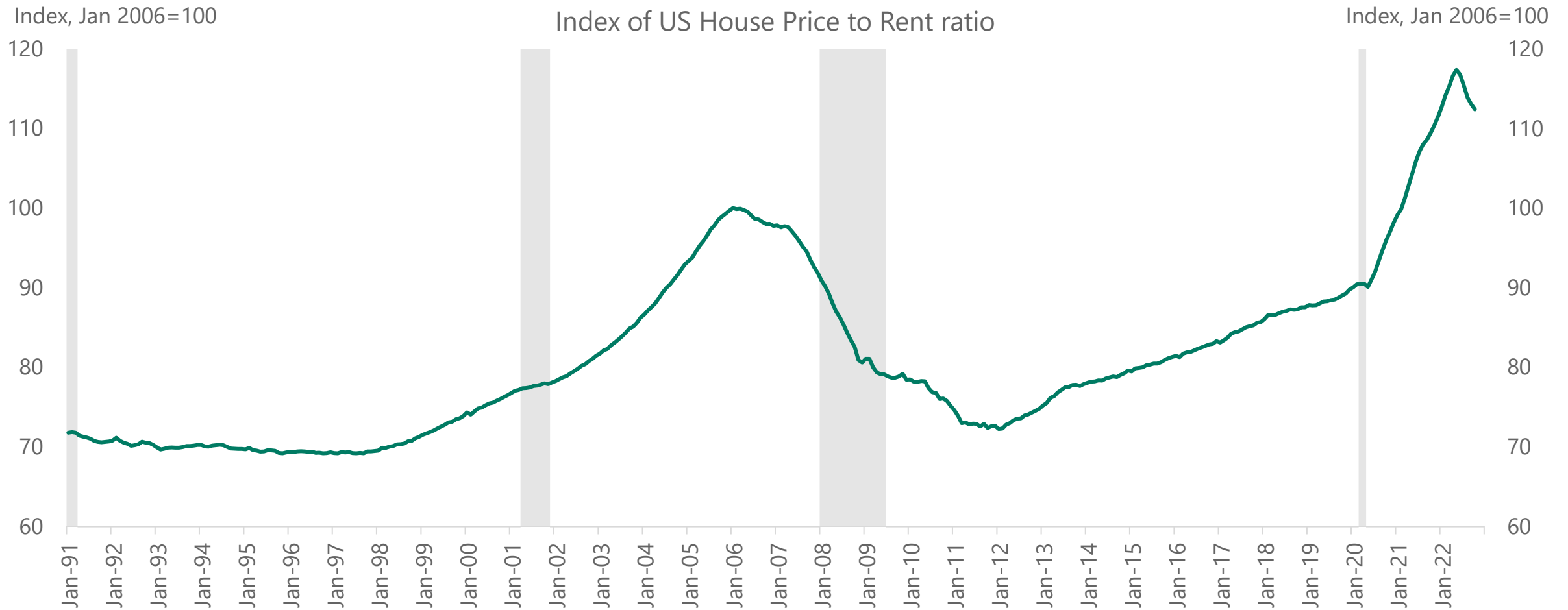
Housing inflation has likely peaked



Housing inflation has peaked

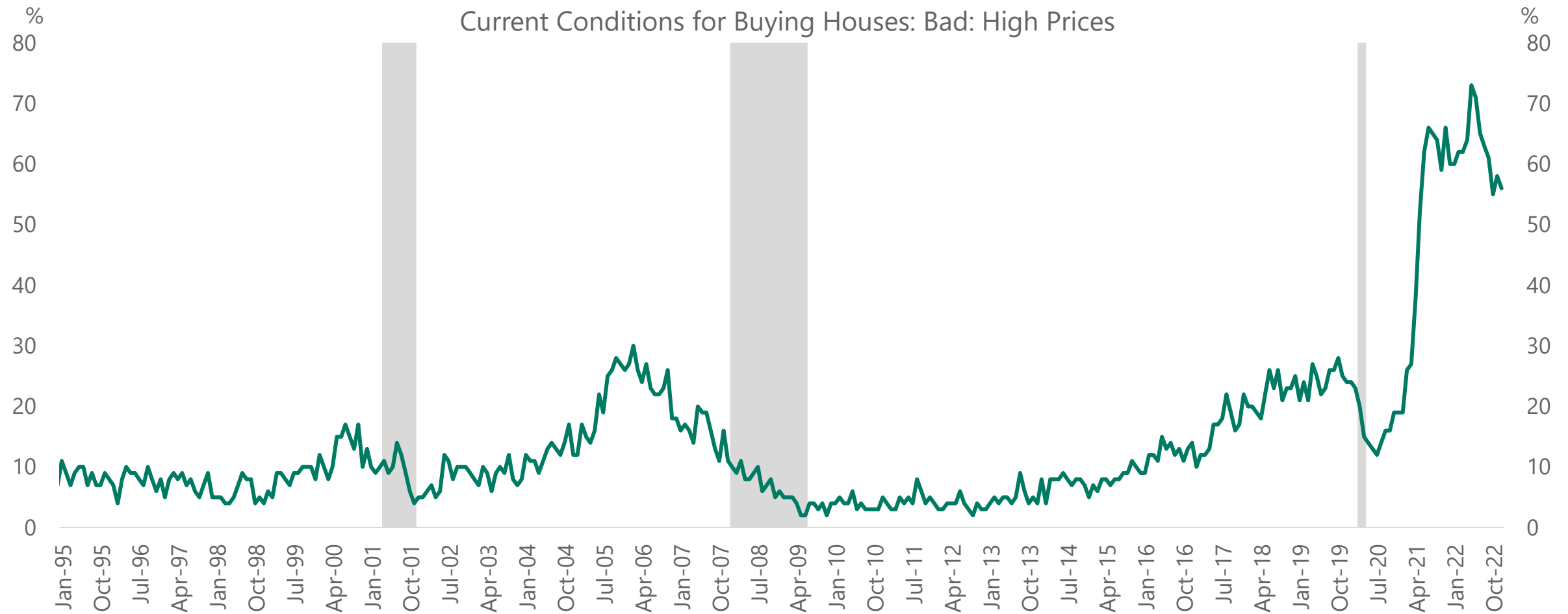


Home price to rent ratio significantly above 2006 levels

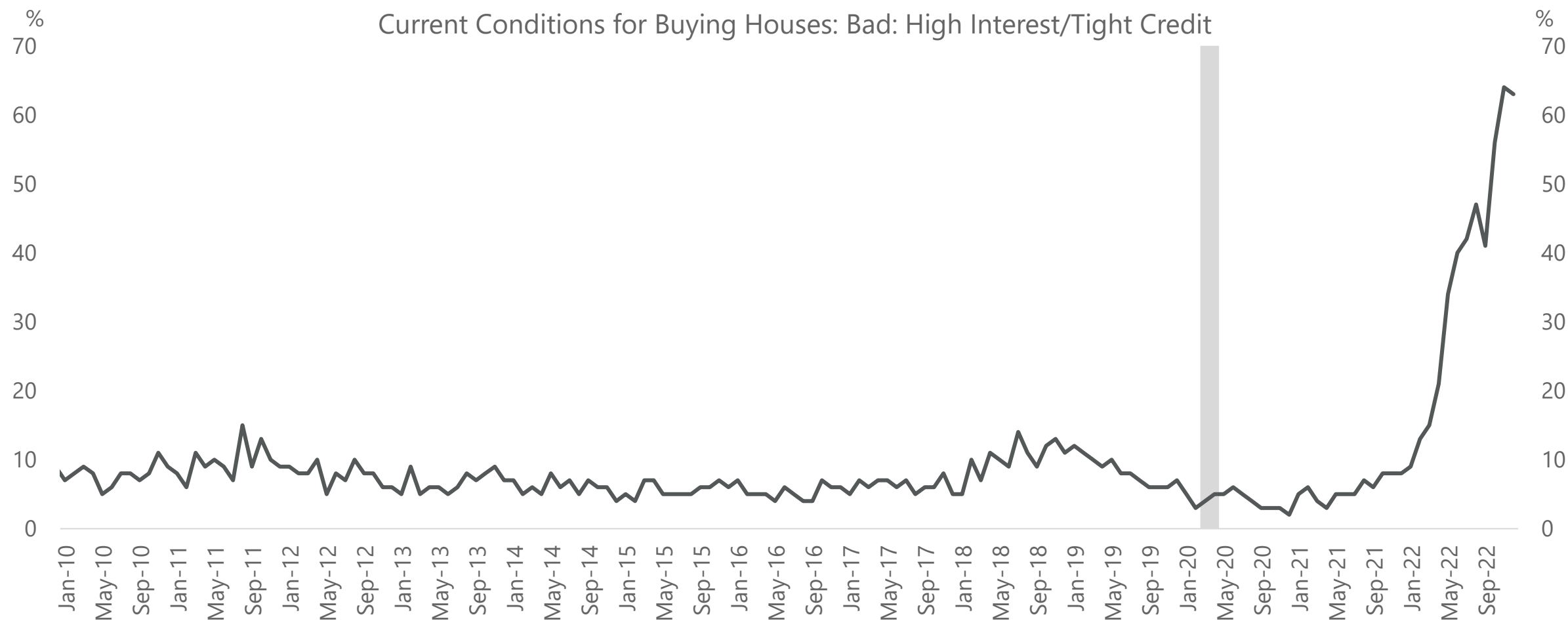


4) Housing Outlook: Elevated interest rates, high home prices, strong supply pipeline, and high building costs are risks to this housing cycle

High home prices having negative impact on homebuyer sentiment



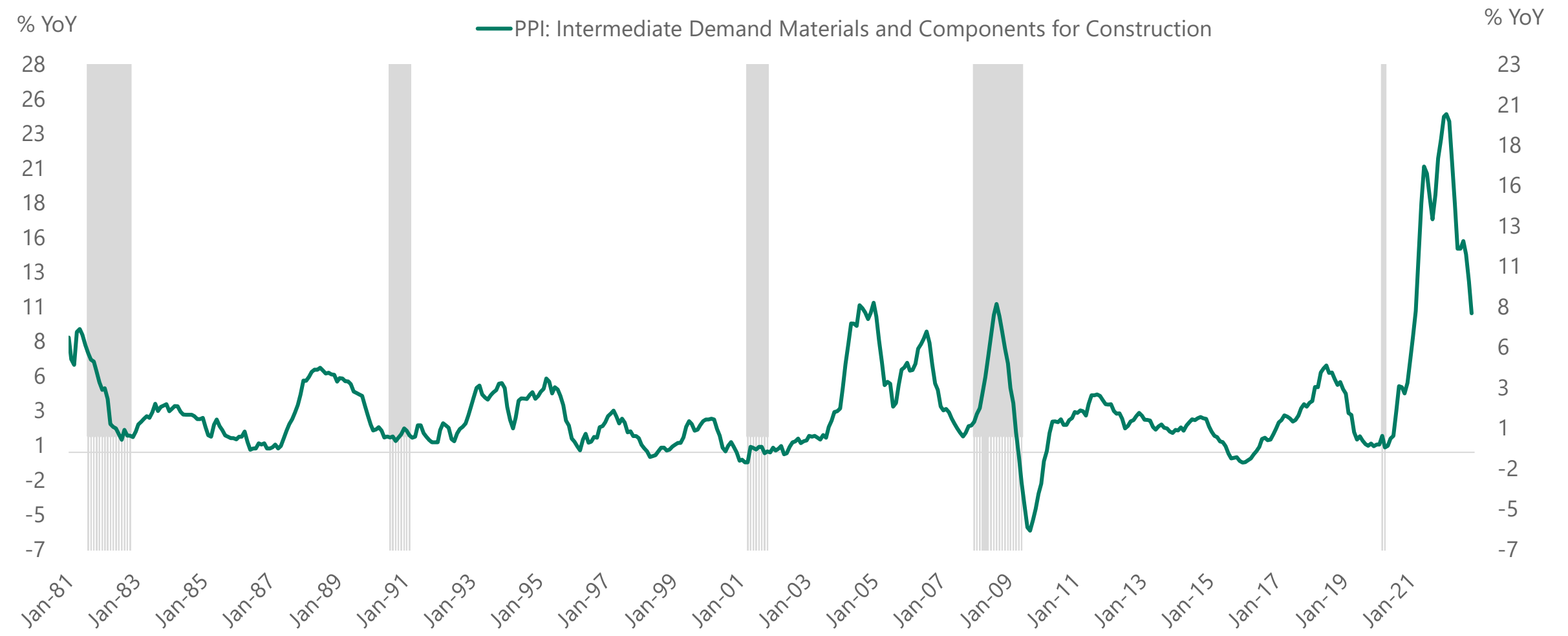
Tighter credit also having negative impact on homebuyer sentiment



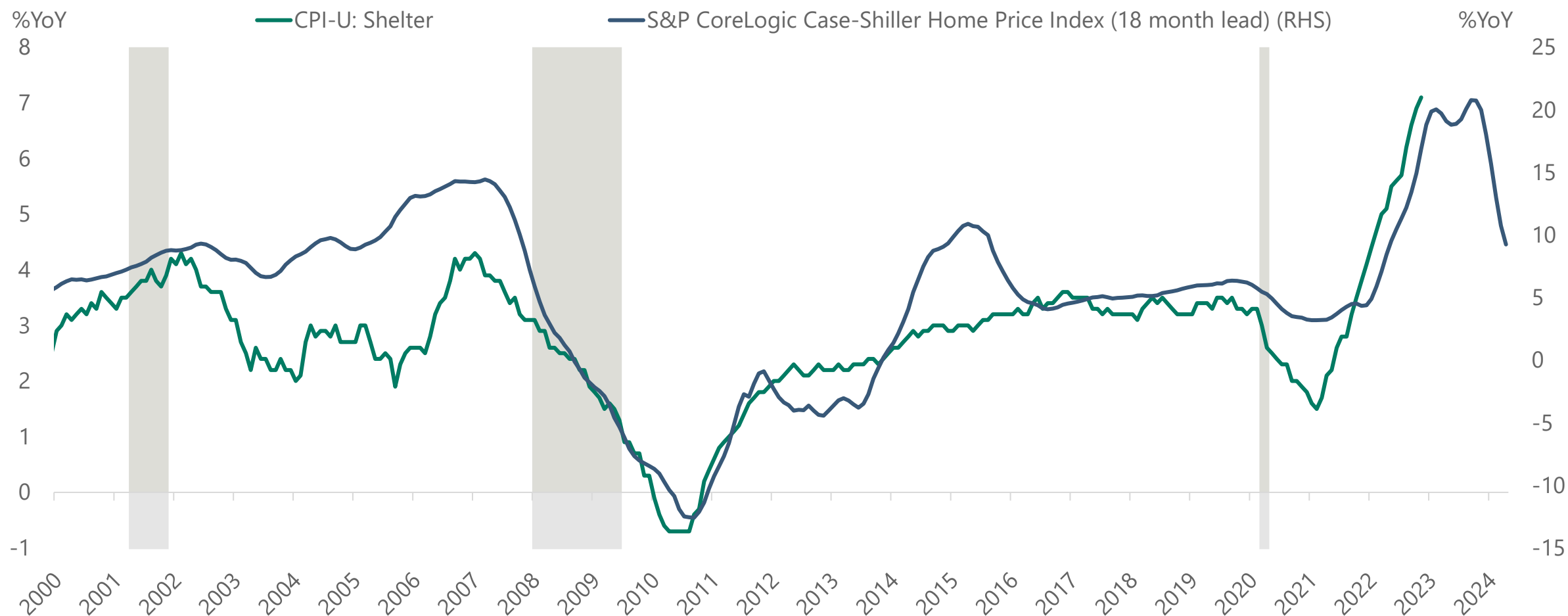
Housing construction costs are high



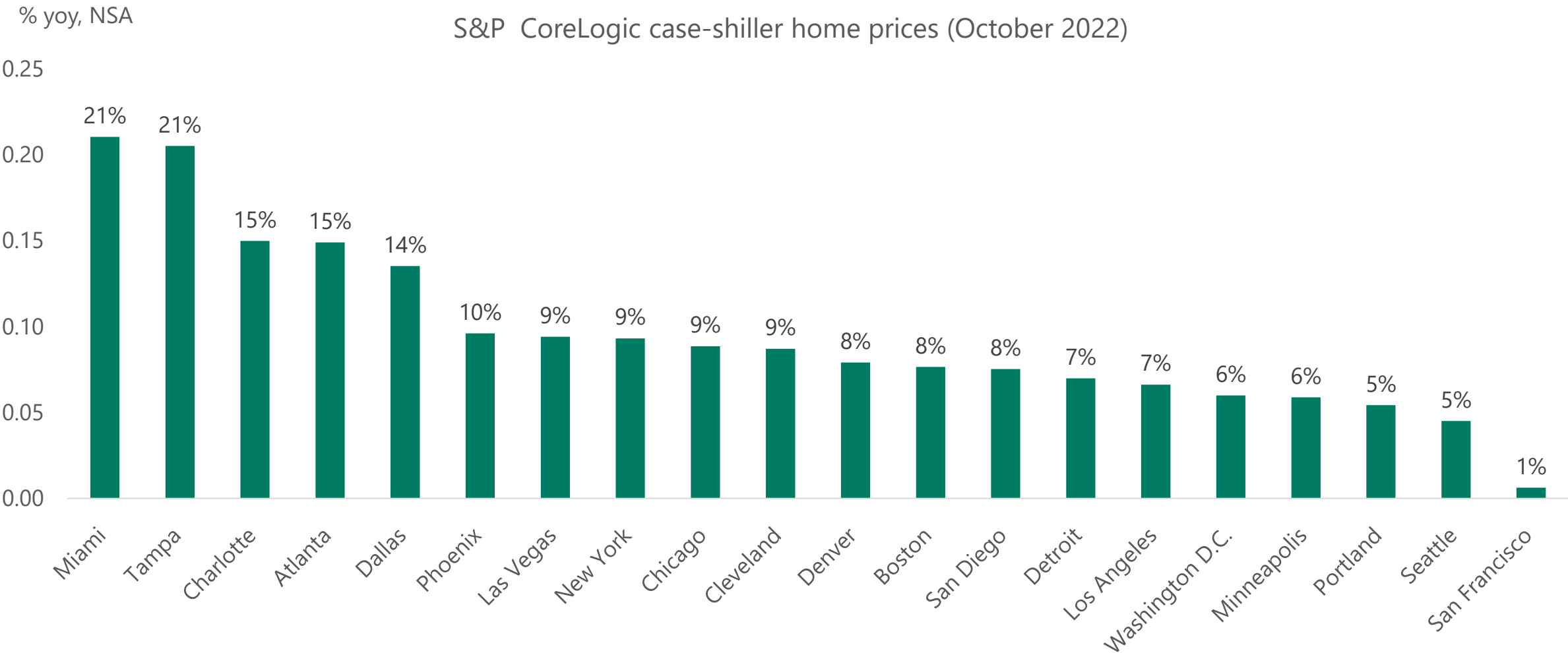
Inflation in input costs declining sharply



Falling home price inflation is helping the Fed

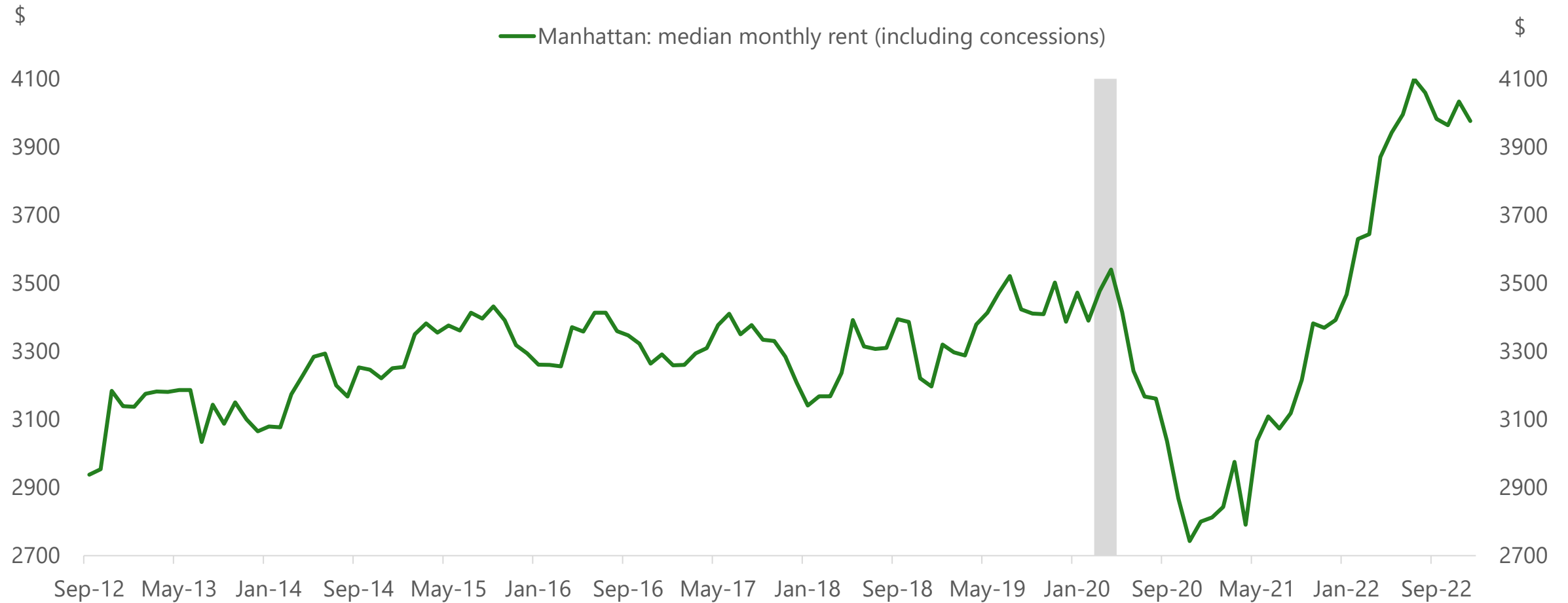


Home prices up 21% in Miami and Tampa

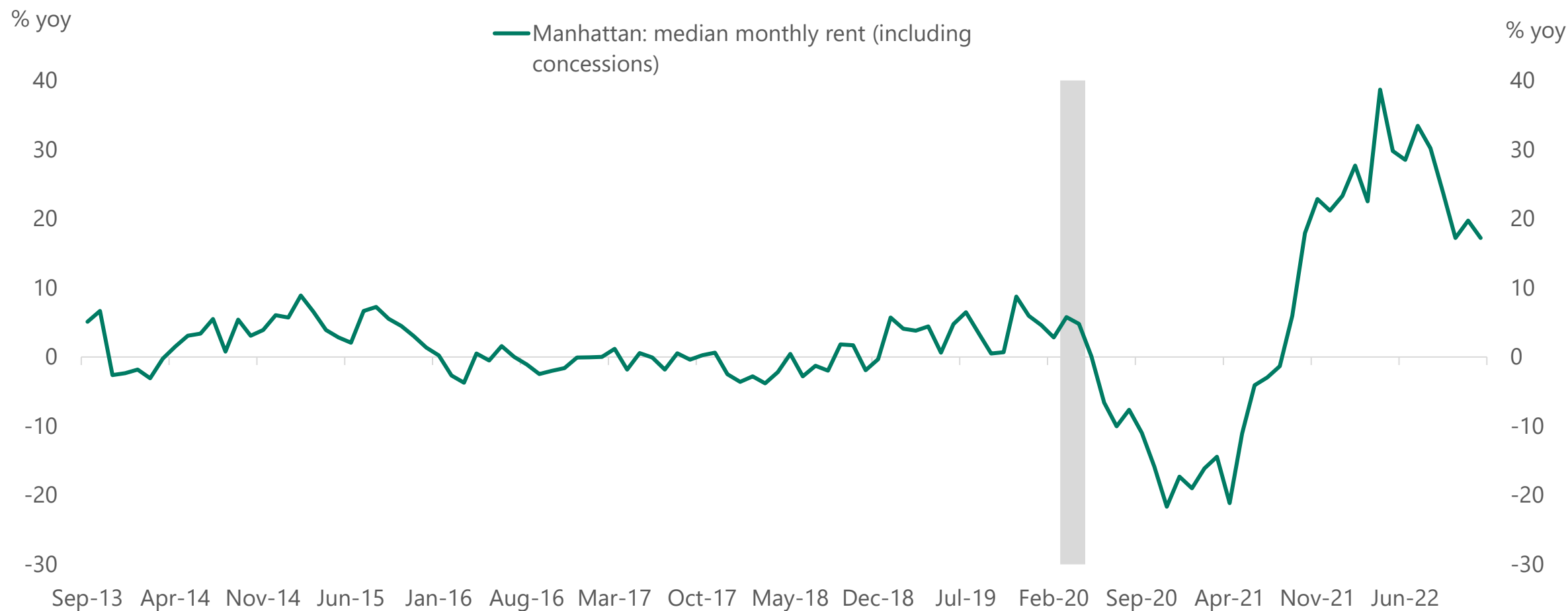


Source: S&P Case-shiller, Bloomberg, Apollo Chief Economist

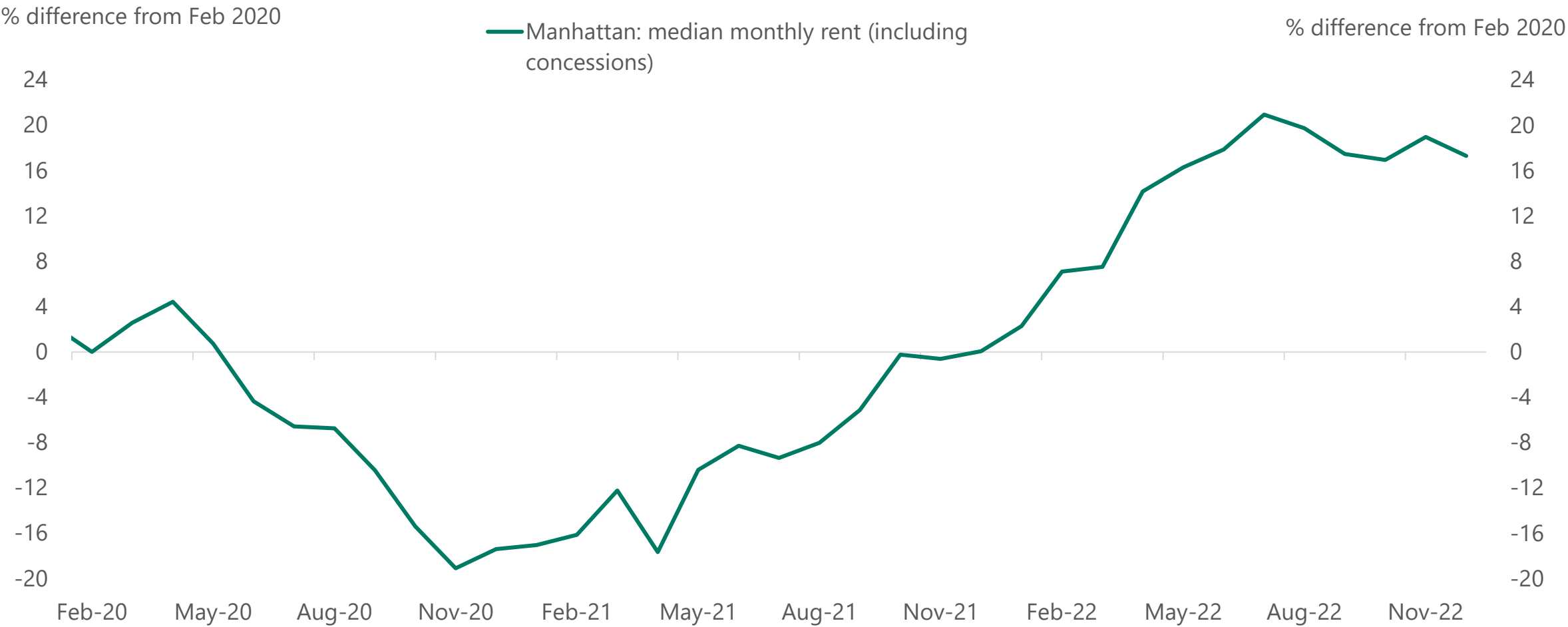
Manhattan rents starting to flatten out



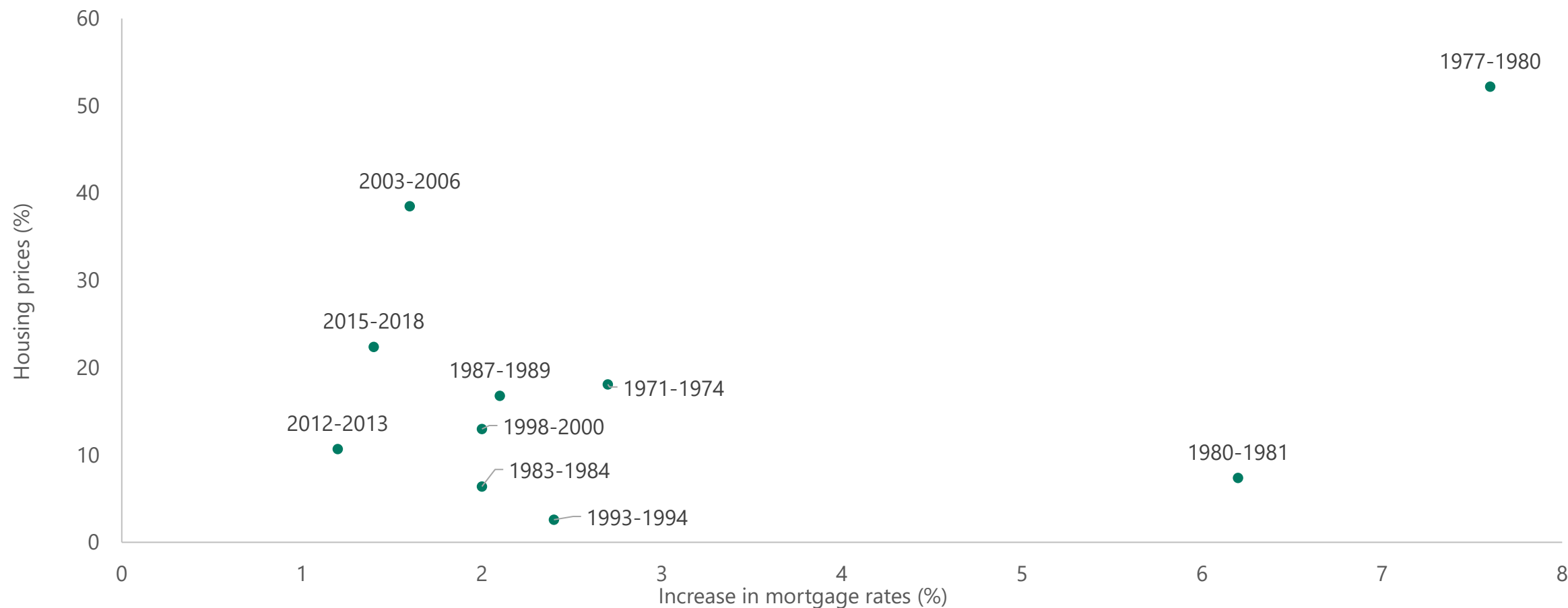
Manhattan rents up 17% year-over-year



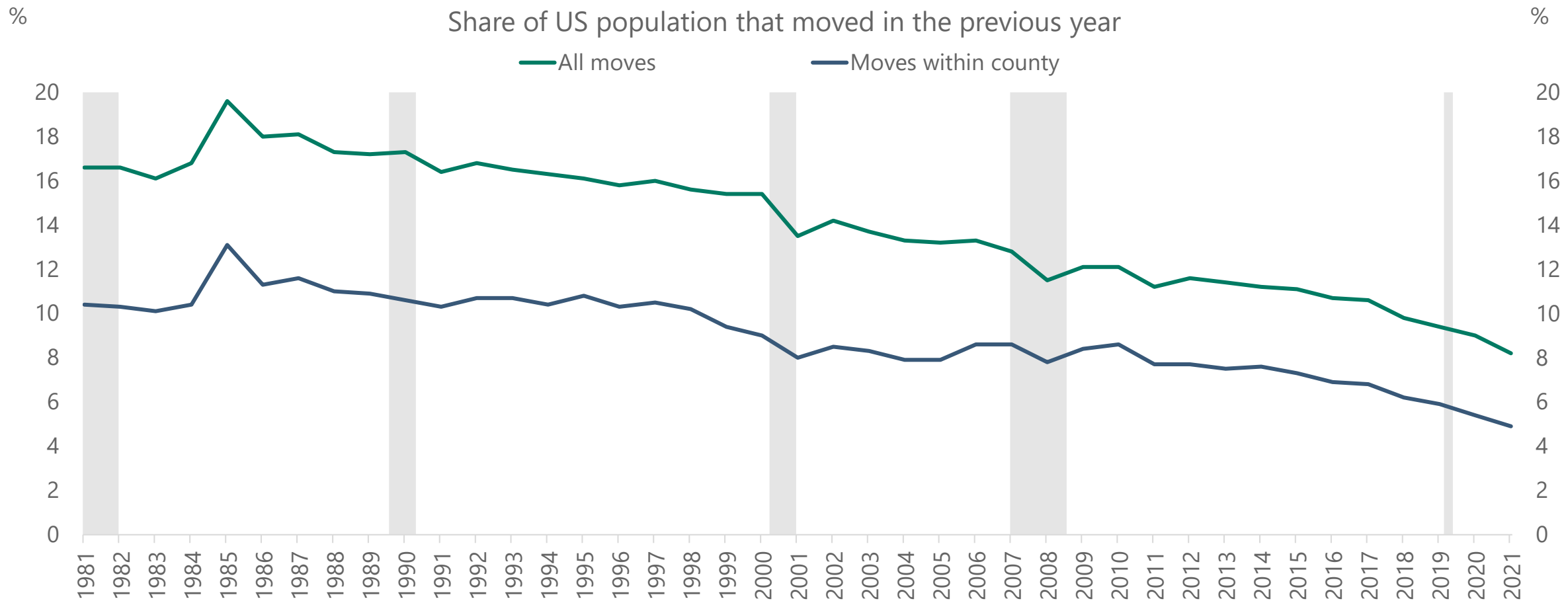
Manhattan rents above pre-pandemic levels



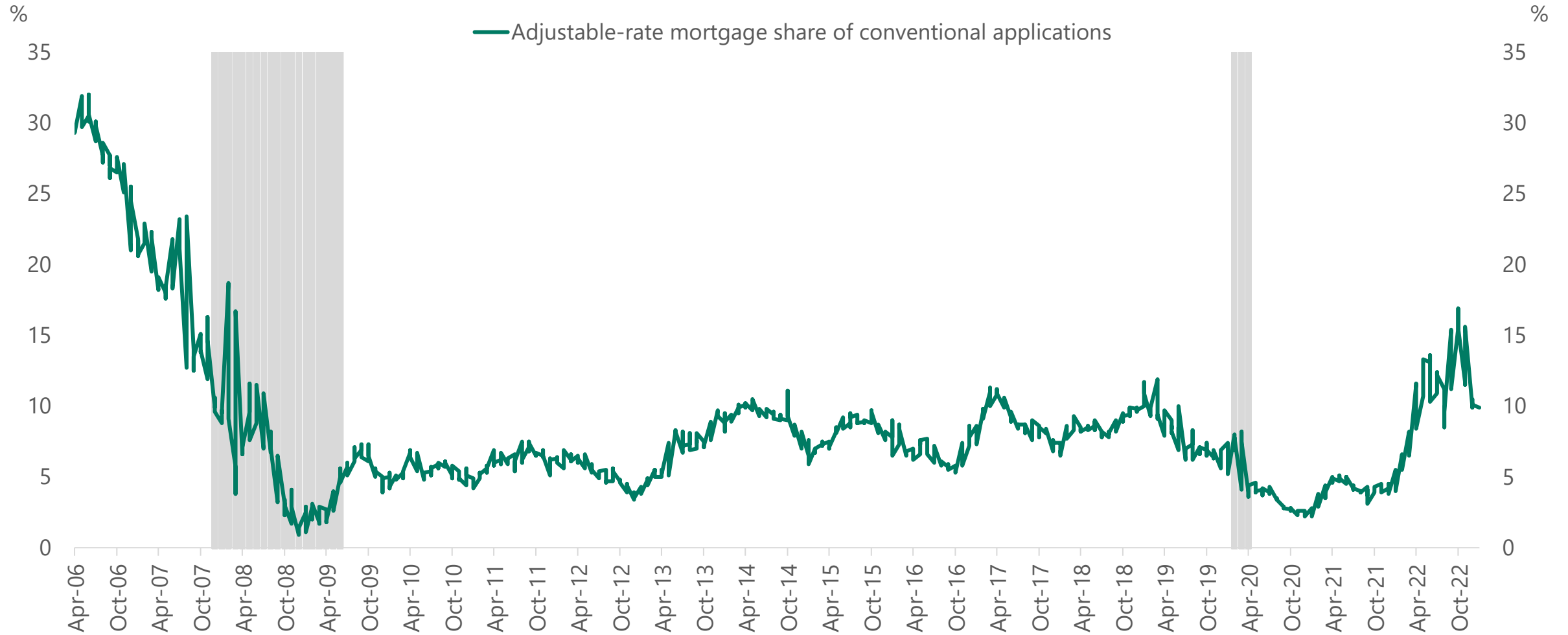
Rising mortgage rates generally associated with lower home price inflation



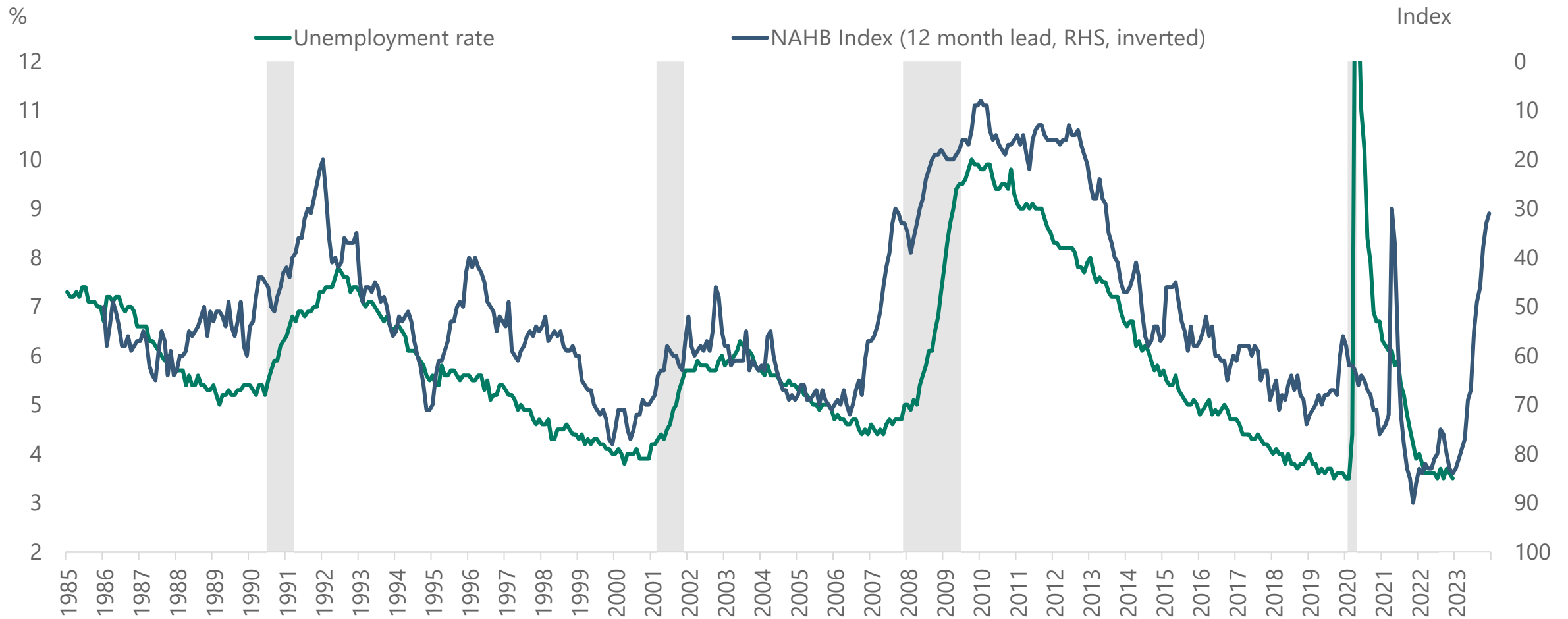
Secular decline in the share of the US population moving to a new address



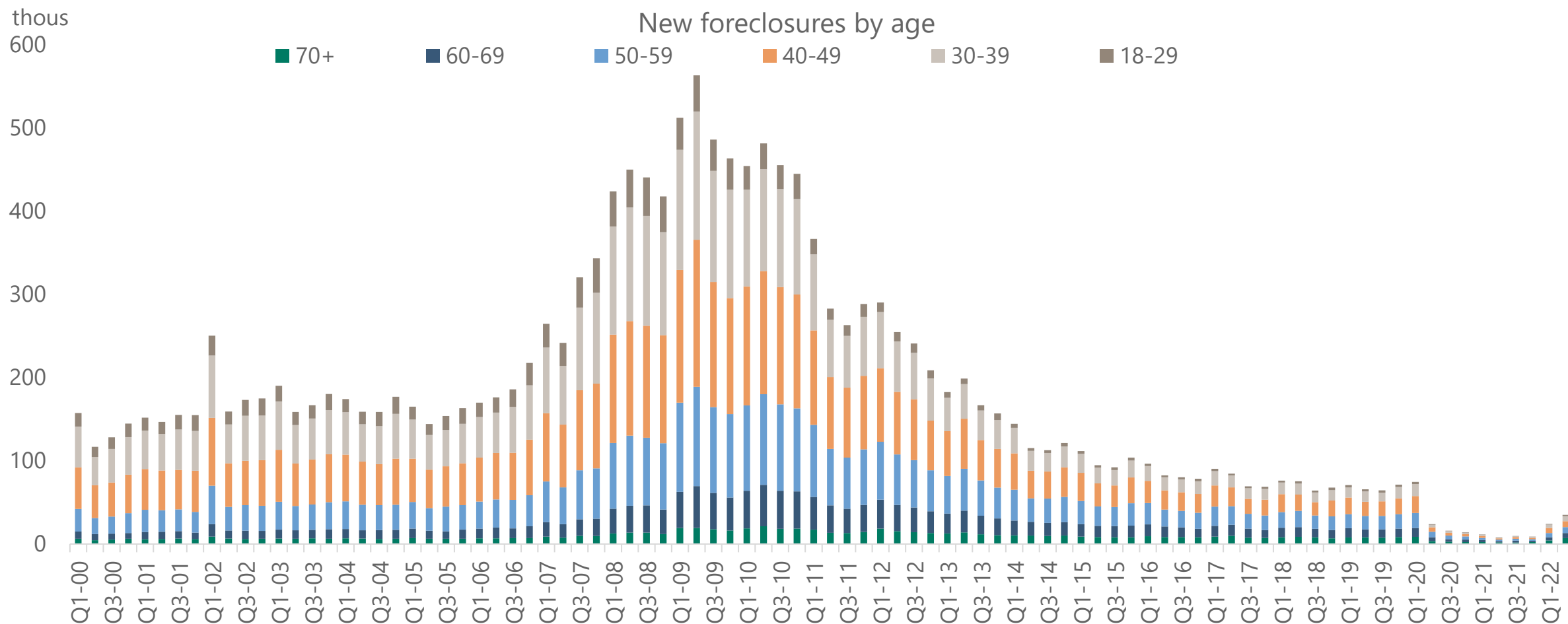
The share of ARMs dropped to 10% of overall loans



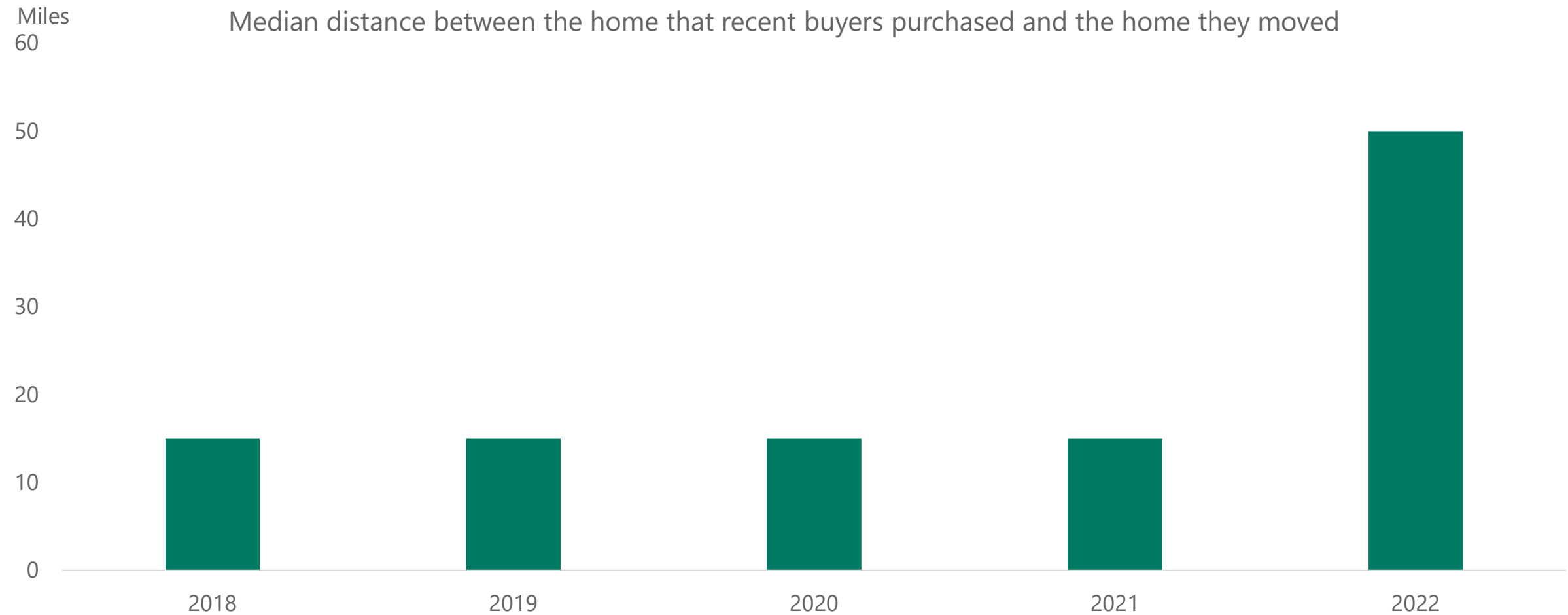
Some upside risks to the unemployment rate as the Fed raises interest rates



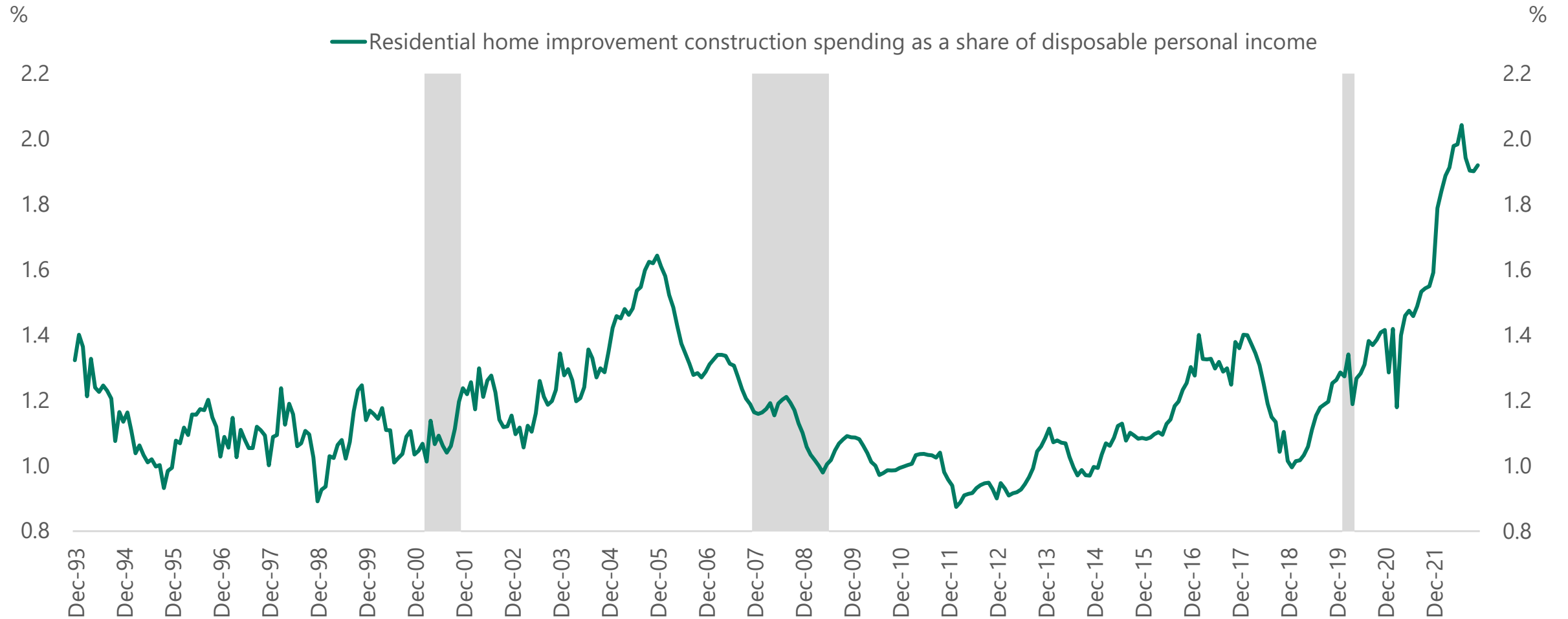
New foreclosures by age



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



Home improvement spending near all-time high levels





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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, including #1 in 2019. 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.