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US Housing Outlook: Housing recovery making inflation more sticky

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Apollo Global Management

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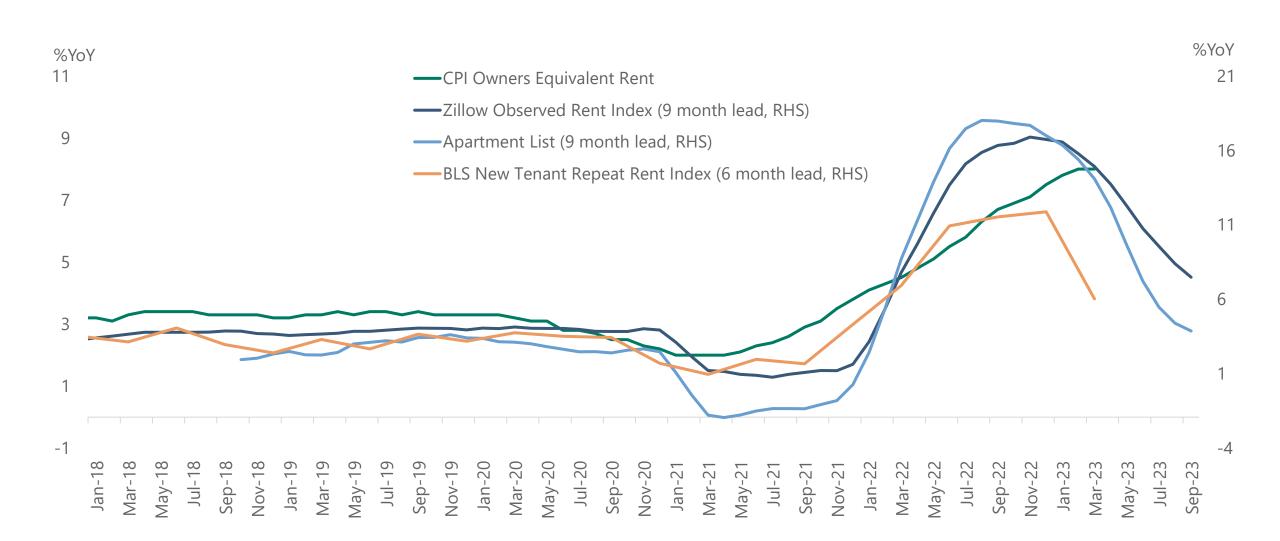
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With the housing market recovering, the anticipated strong decline in OER may never happen

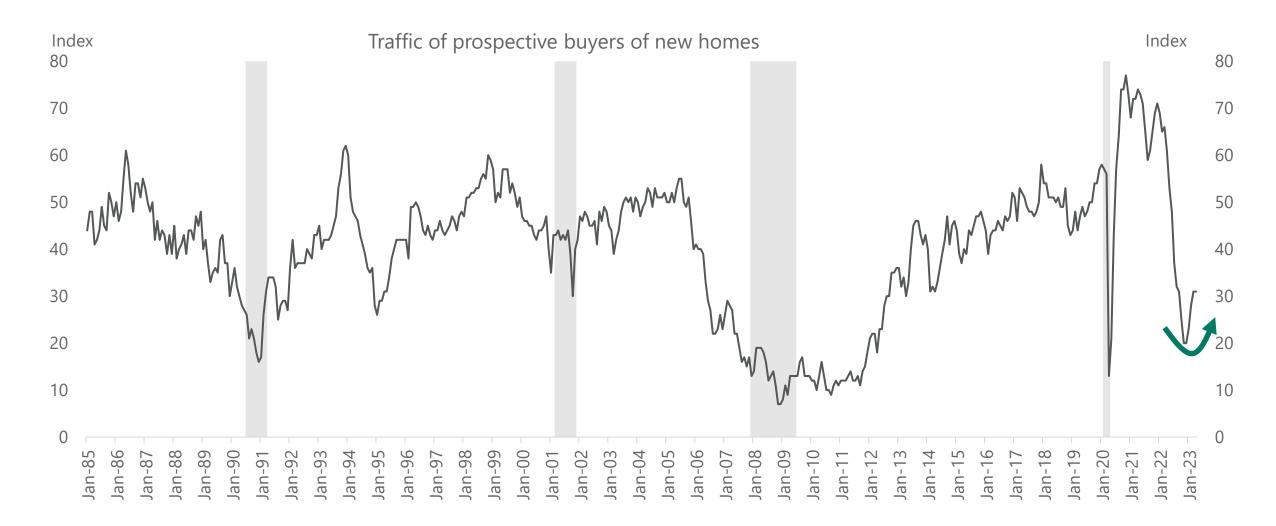


Source: Zillow, BLS, Haver Analytics, Apollo Chief Economist

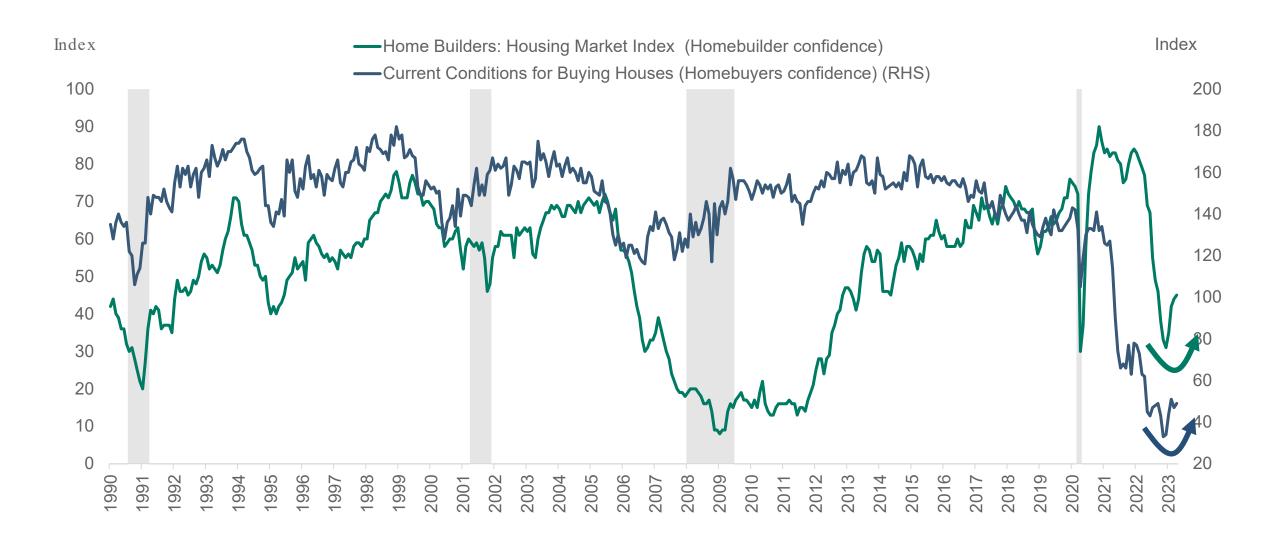
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Leading indicators of the housing market

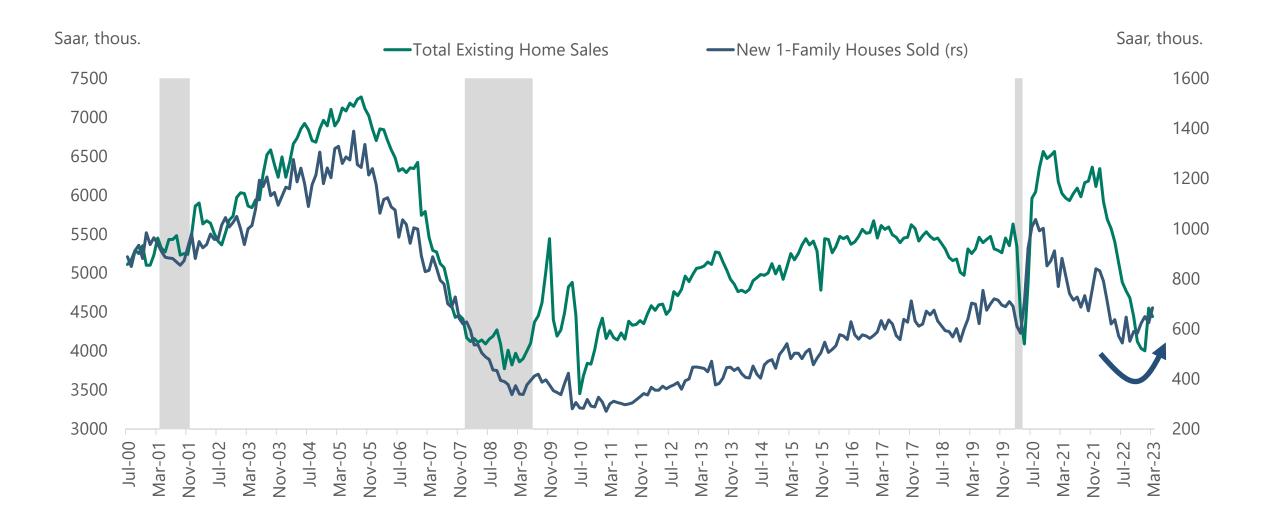
Traffic of prospective homebuyers starting to improve likely driven by solid employment growth, high wage growth, and plenty of excess savings



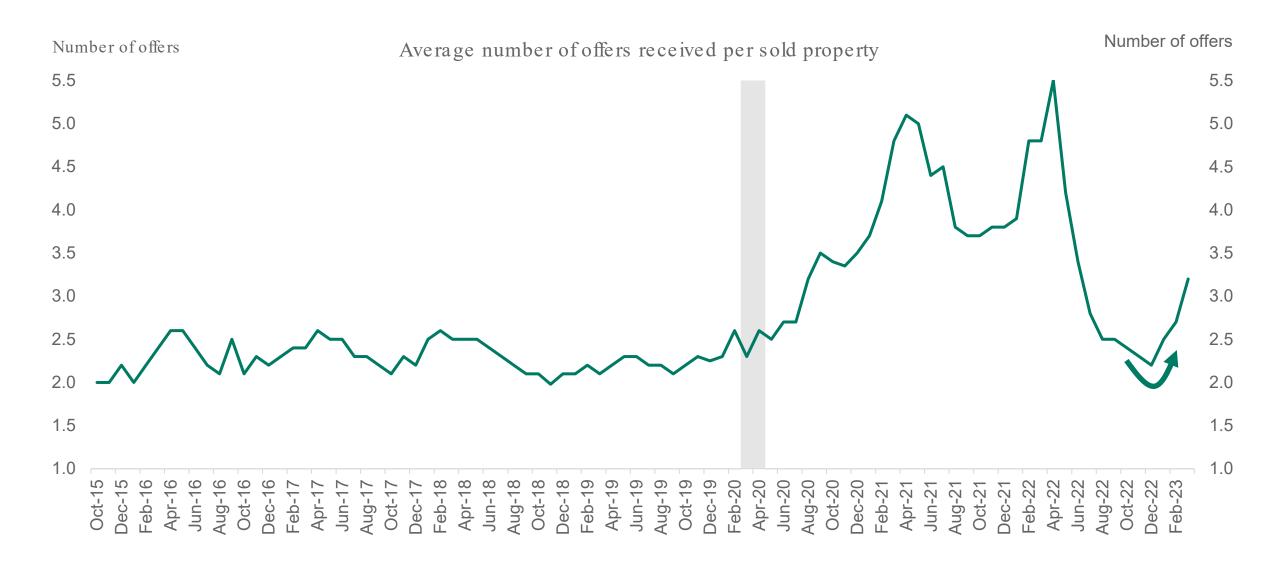
Confidence improving for homebuyers and homebuilders



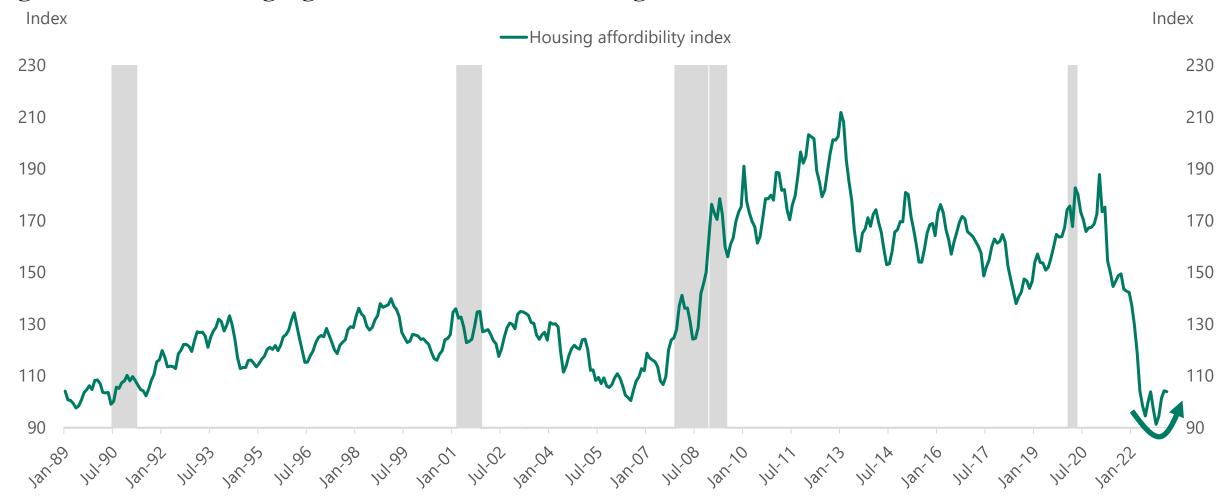
Home sales starting to recover



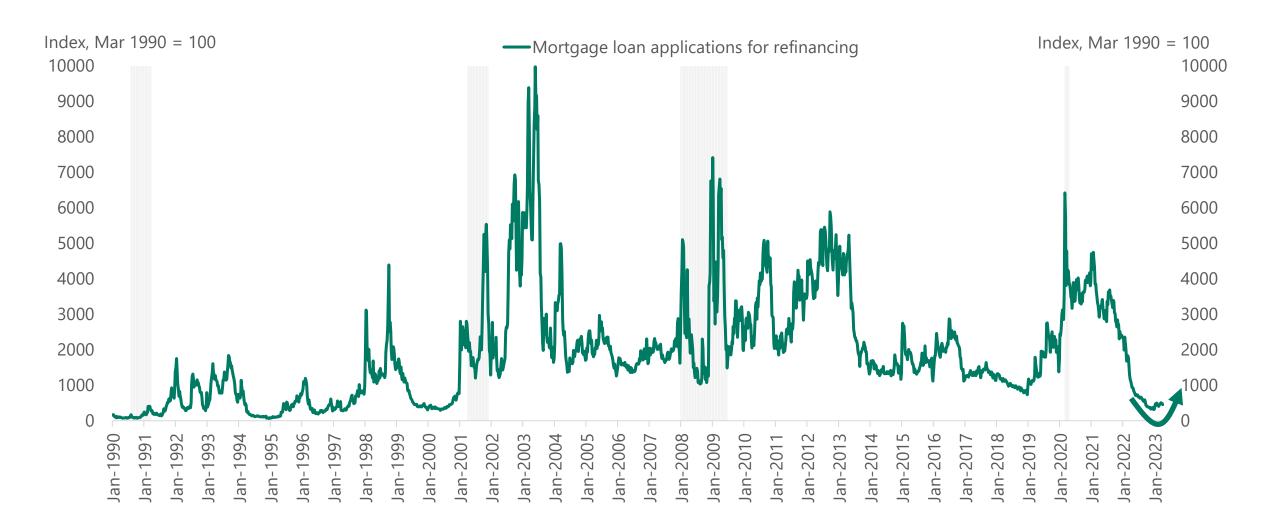
Average number of offers received per sold property is starting to recover



Housing affordability at 2007 levels but starting to bottom because of solid job growth, robust wage growth, and excess savings in the household sector

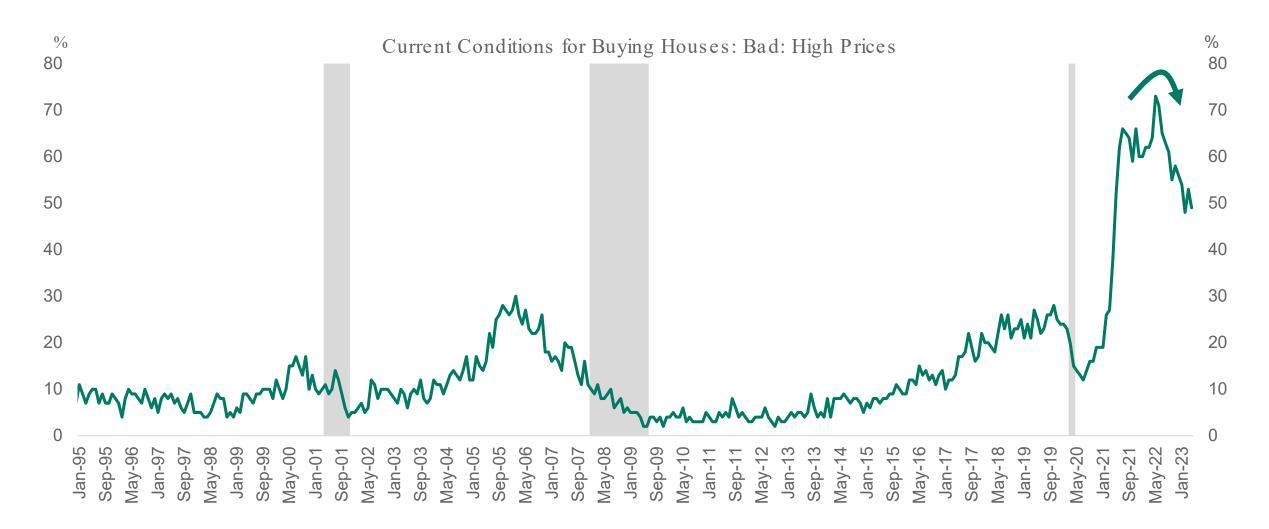


Mortgage refi applications starting to recover



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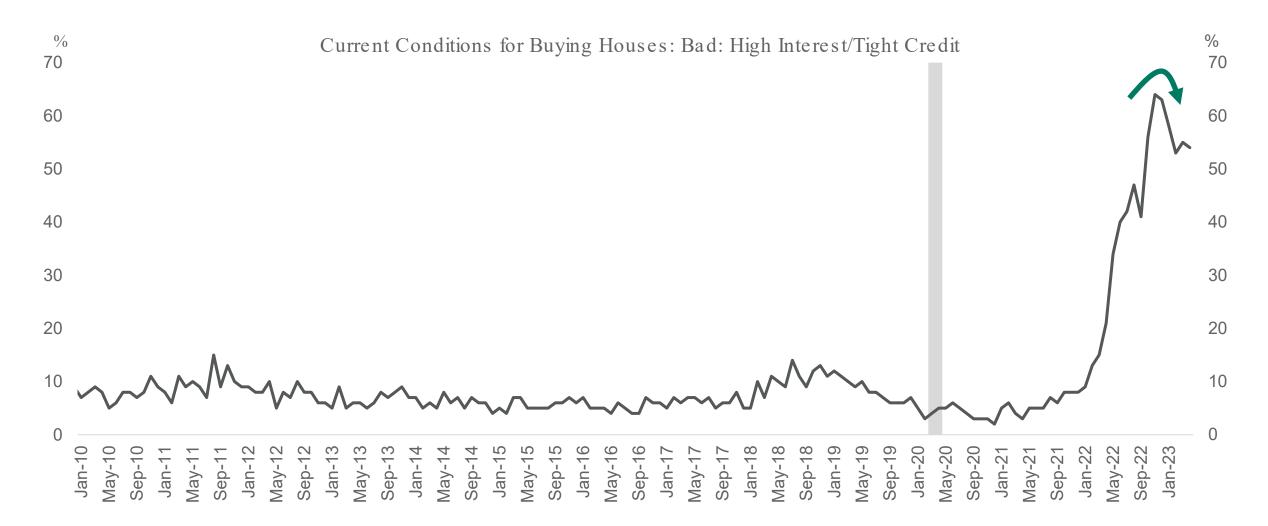
Despite high prices, homebuyer sentiment improving



Source: University of Michigan, Apollo Chief Economist

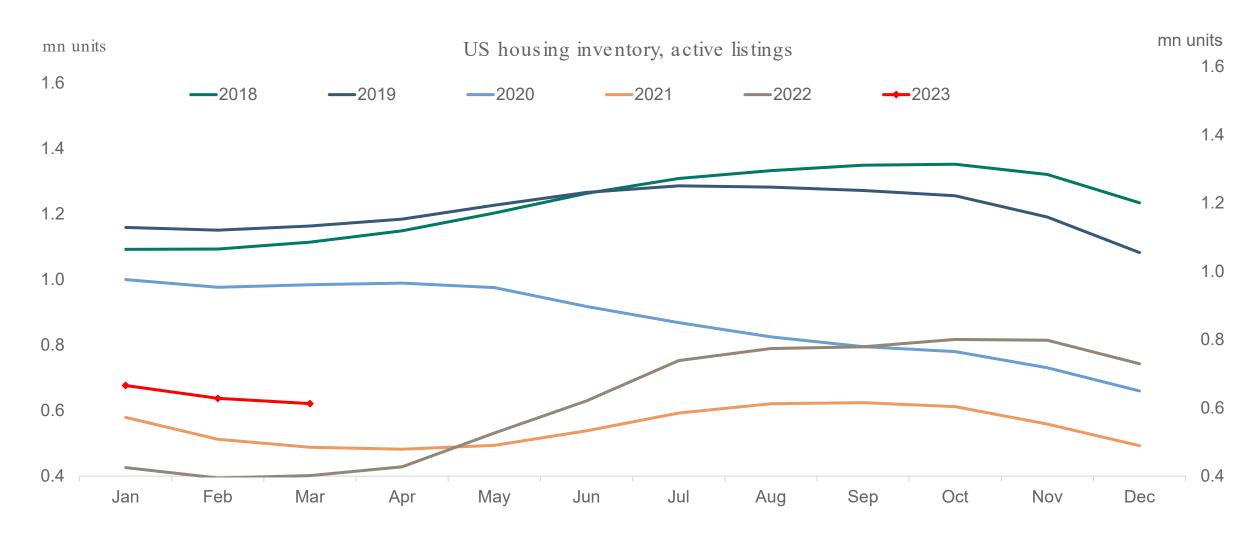
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Homebuyer sentiment about mortgage rates and credit conditions getting better



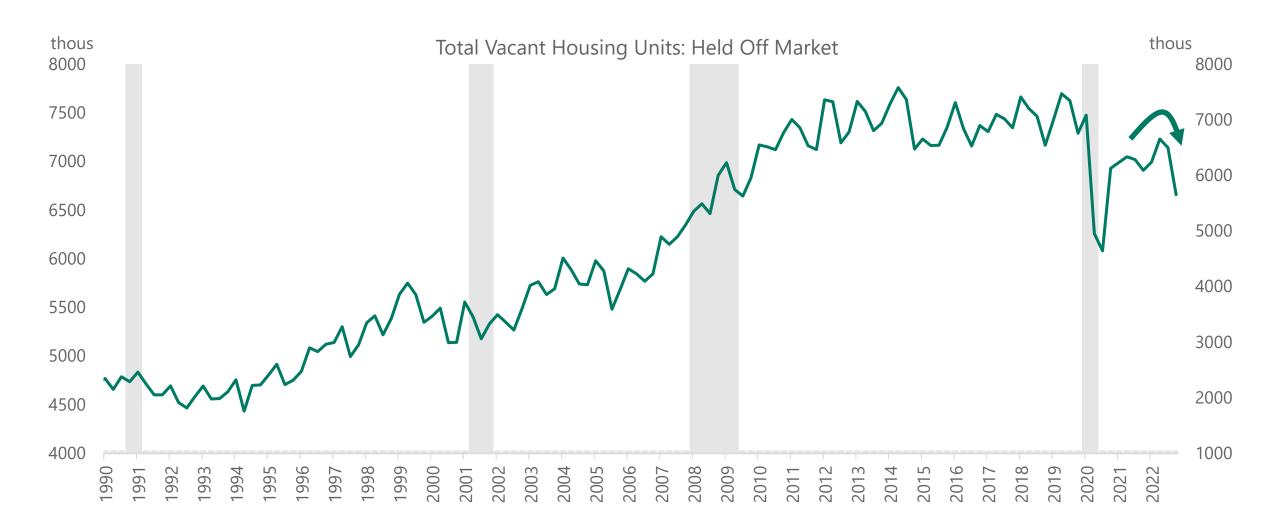
Source: University of Michigan, Apollo Chief Economist

Active listings still at very low levels, very low inventory

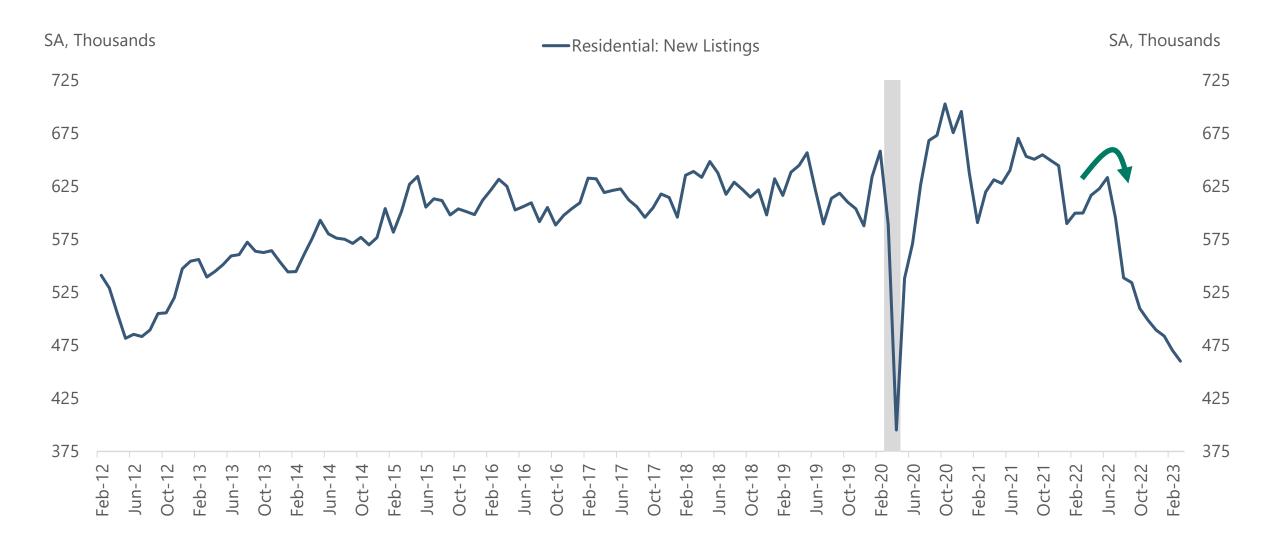


Source: Realtor.com, Apollo Chief Economist

Vacant housing units held off market falling

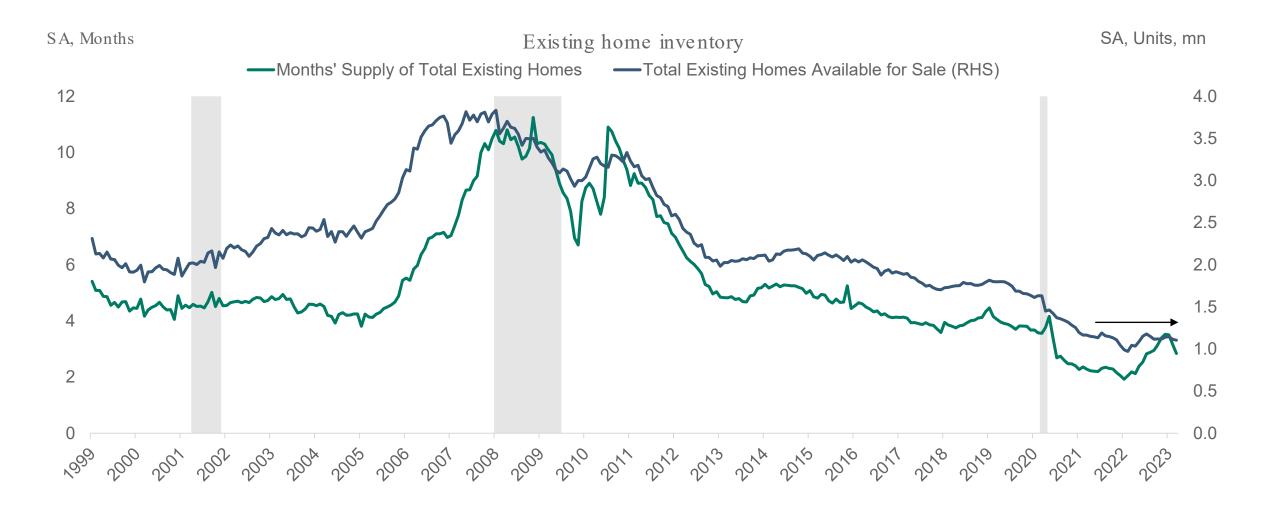


Fewer people listing their home for sale in a down market

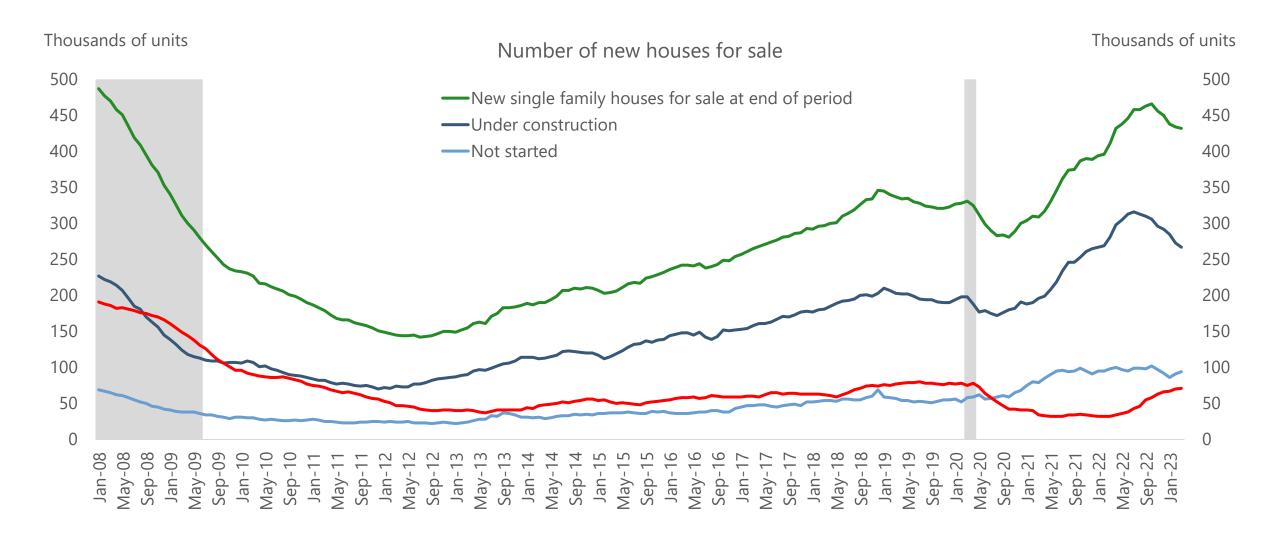


Source: Redfin, Haver Analytics, Apollo Chief Economist.

Homesellers don't want to sell their house at a discount: The stock of total existing homes for sale moving sideways

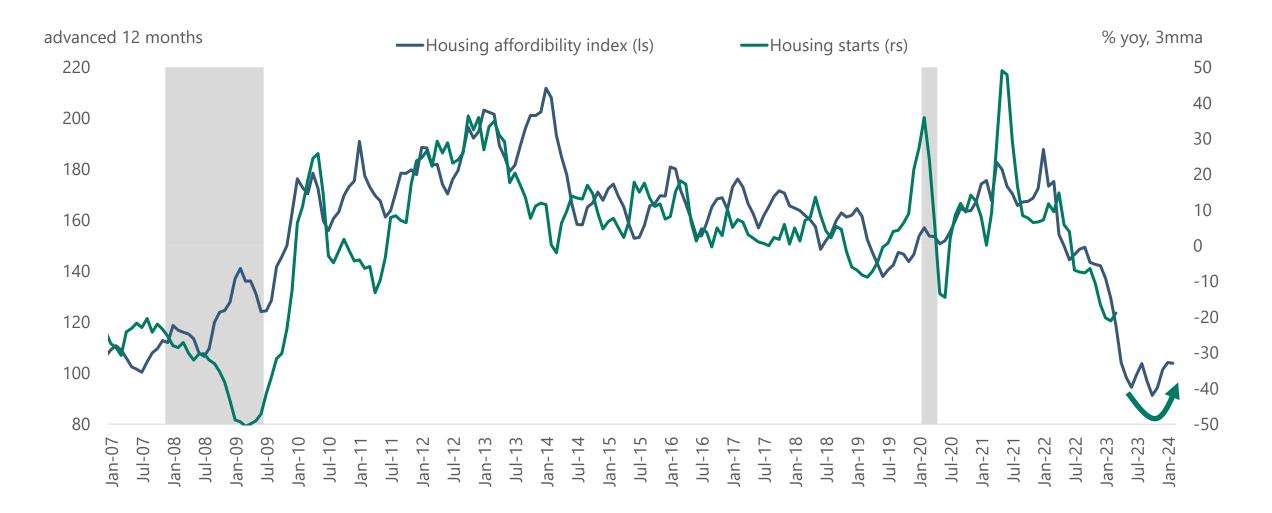


New houses for sale under construction is coming down



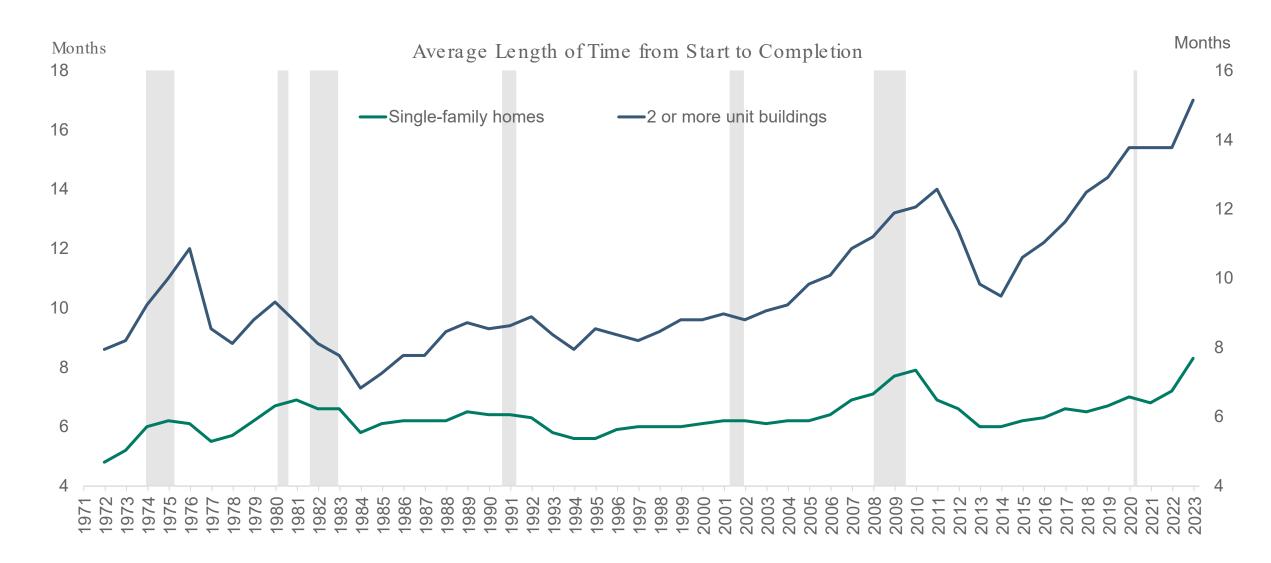
Source: Census Bureau, Apollo Chief Economist

Housing starts also showing signs of bottoming

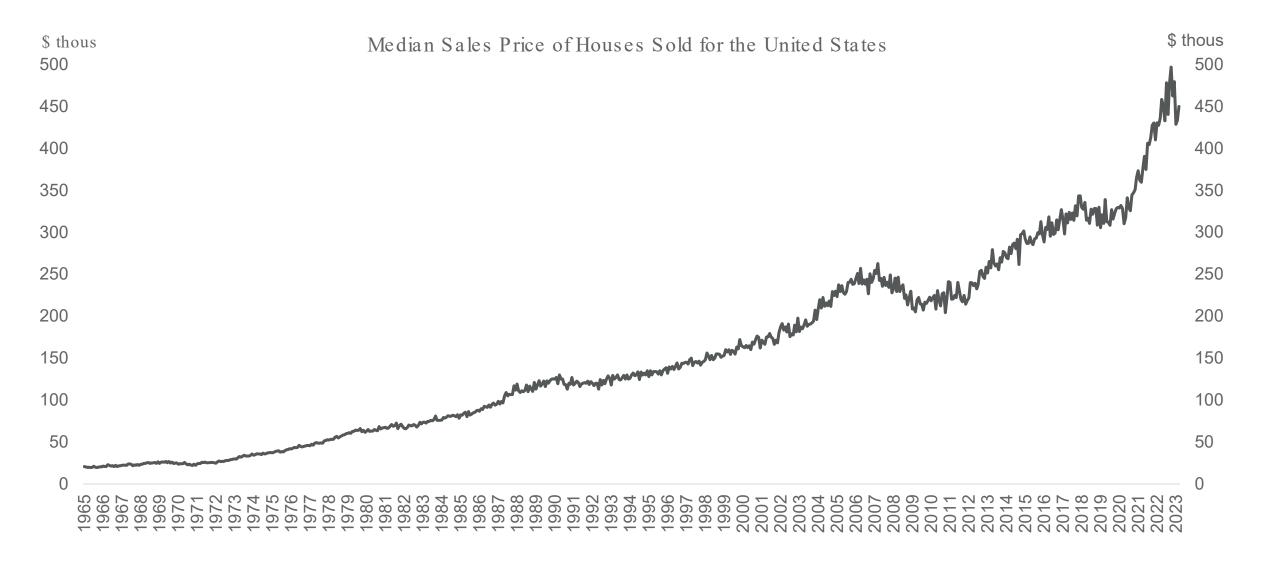


Source: Bloomberg, Apollo Chief Economist

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

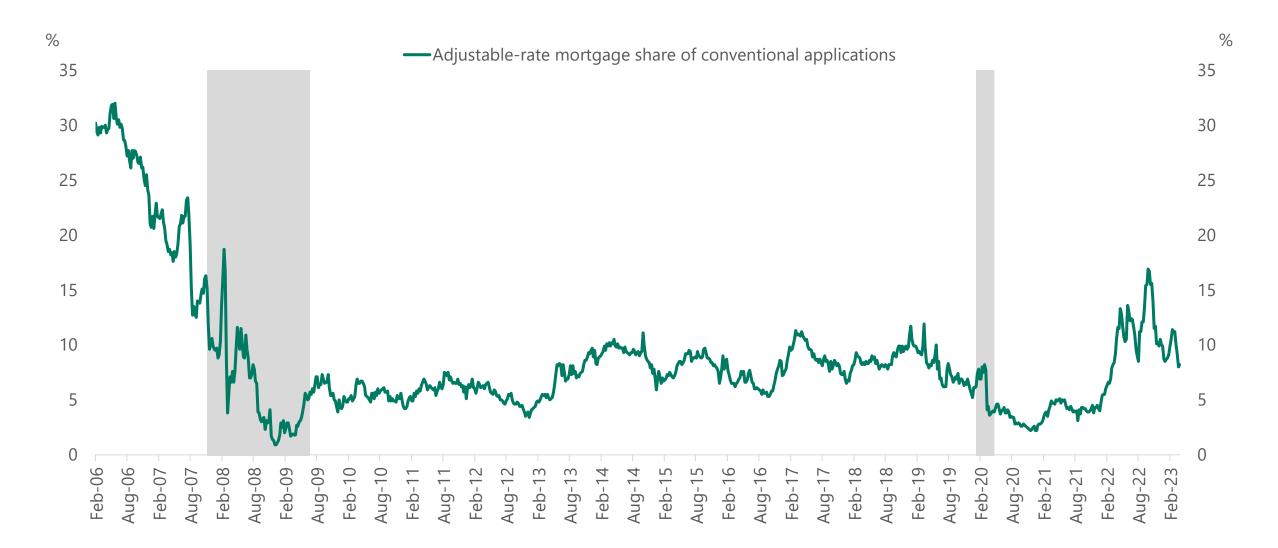


Median home sales price now \$450K

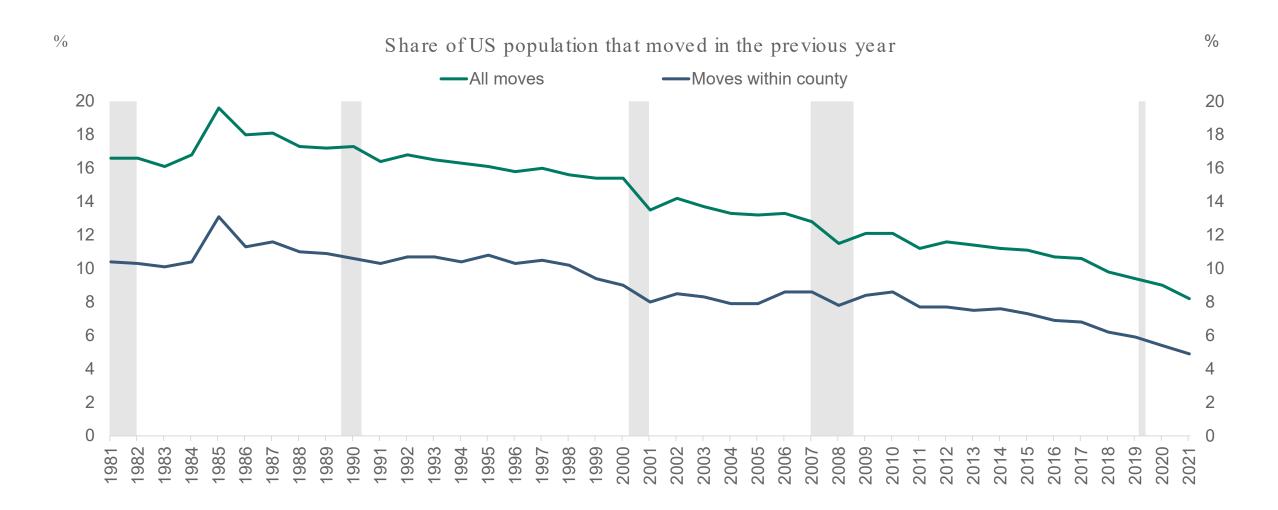


Source: Census Bureau, Apollo Chief Economist

ARM share of total mortgage applications at 8%



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

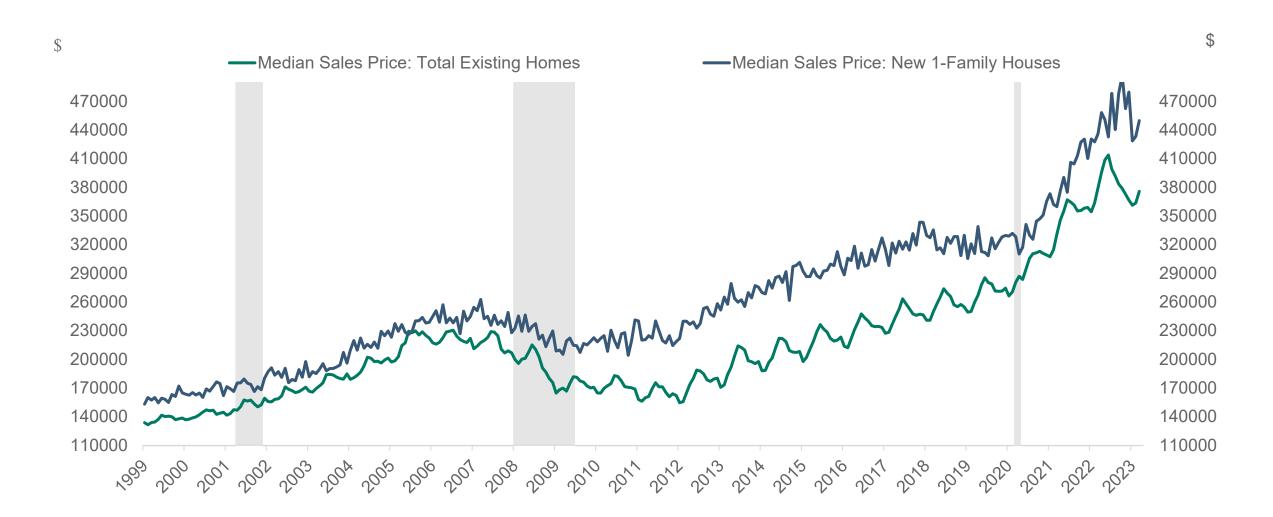


Source: Census CPS, Apollo Chief economist

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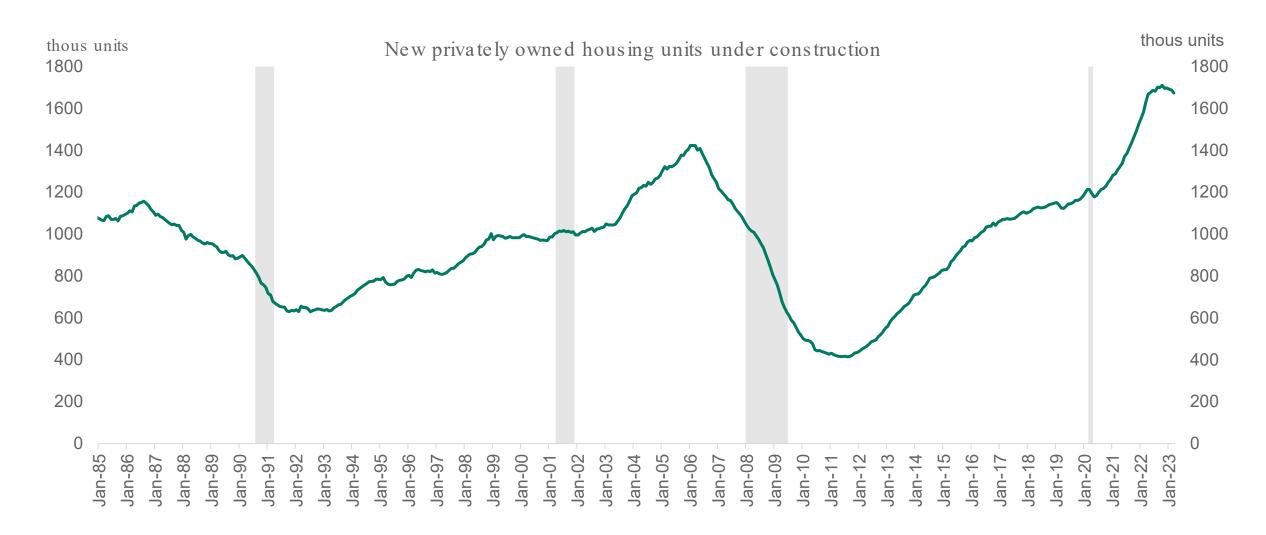
New versus existing homes

House prices are down a bit for both new and existing homes

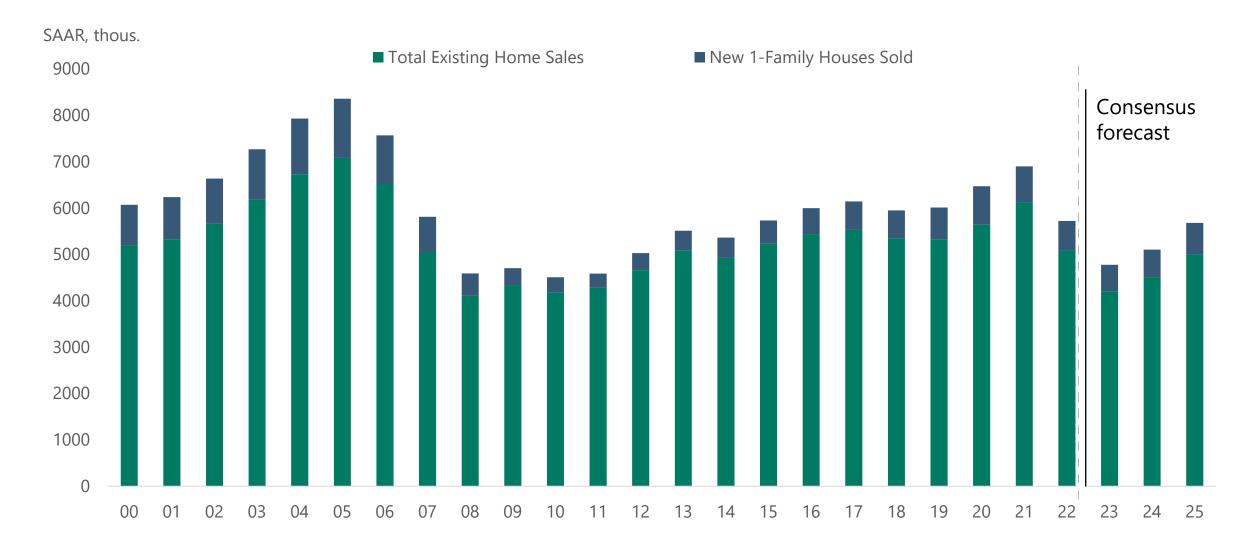


Source: Census, Apollo Chief Economist

New privately owned housing units under construction starting to peak



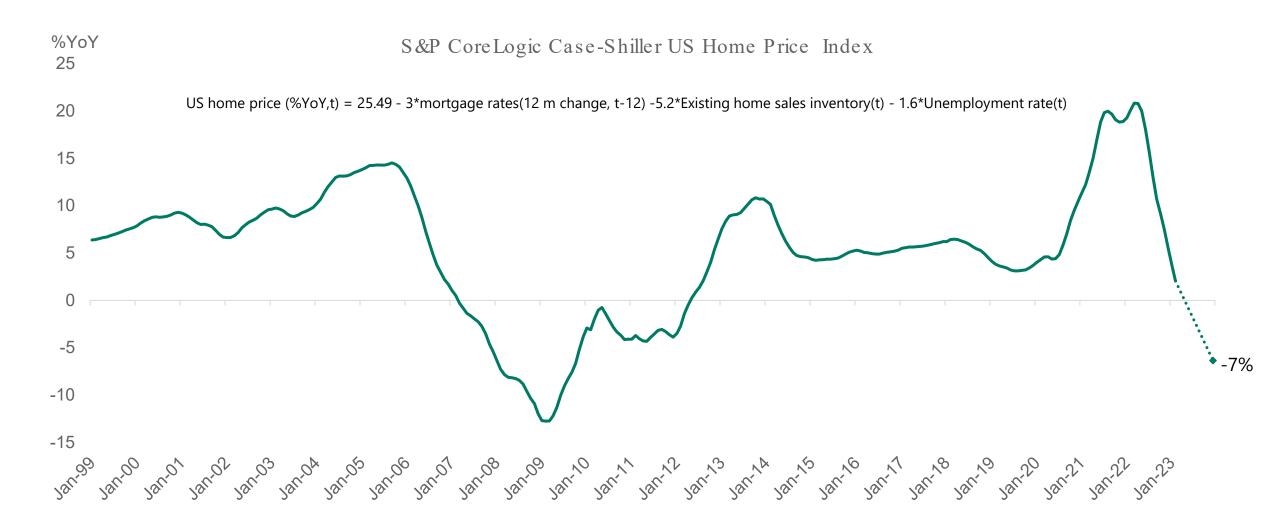
Consensus is forecasting a soft landing in home sales



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US house price model

US house price model

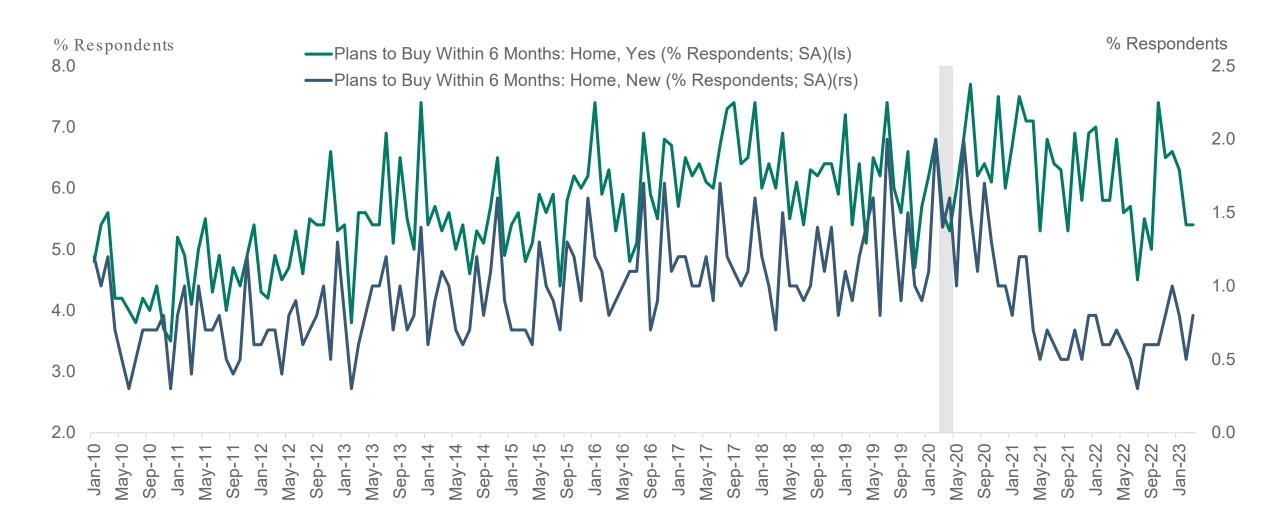


Source: Bloomberg, Apollo Chief Economist

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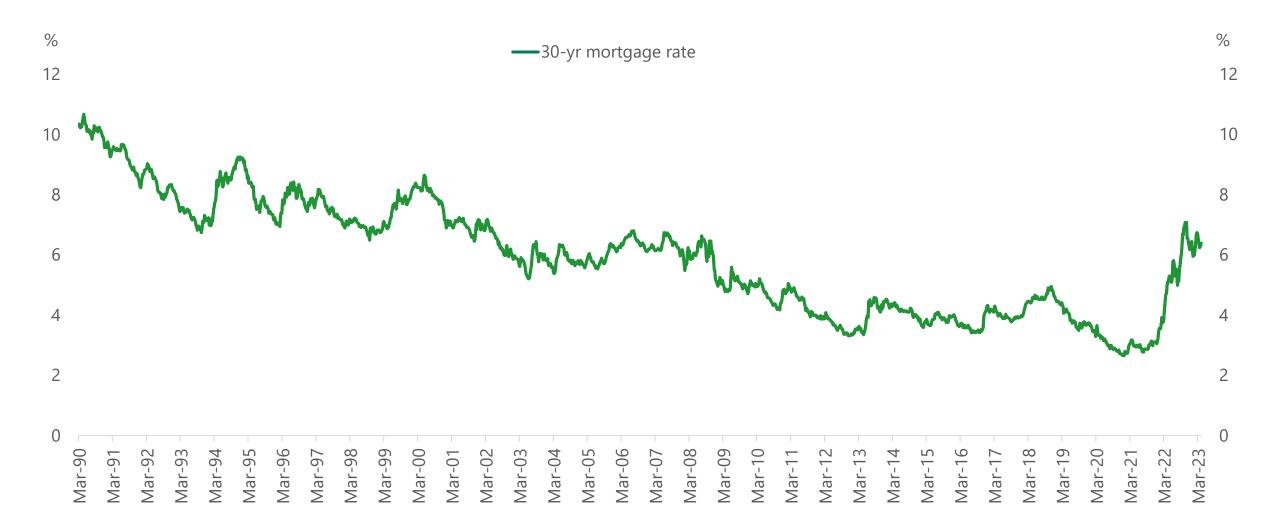
1) Housing Demand: Higher mortgage rates and high home prices slowing demand

Plans to buy a home stabilizing



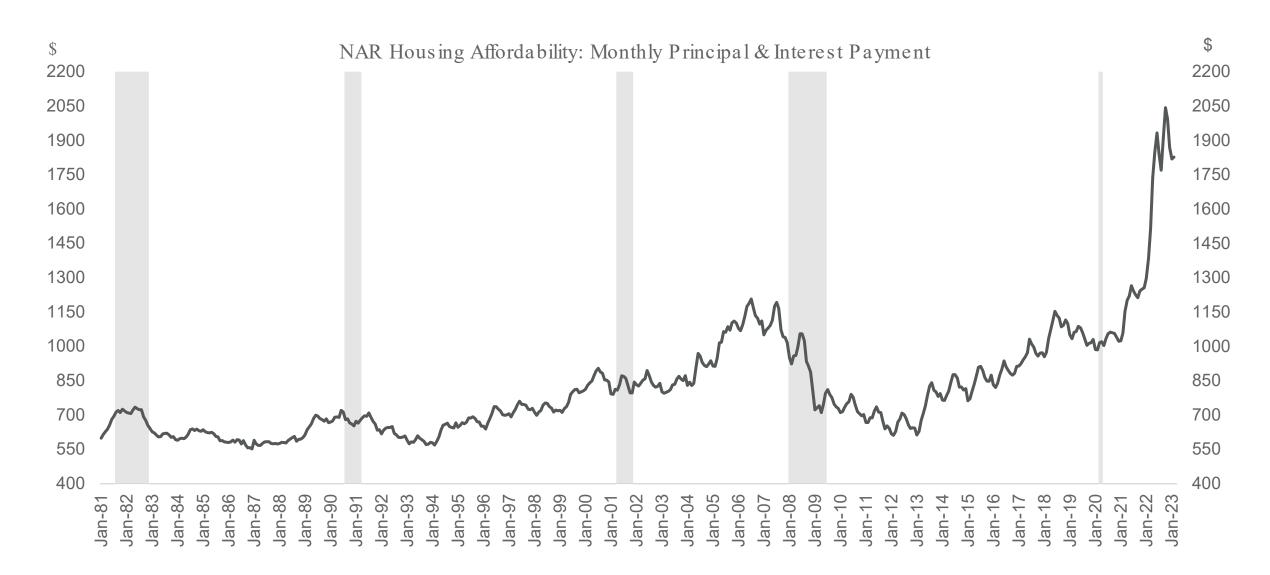
Source: Conference Board, Apollo Chief Economist

Mortgage rates elevated



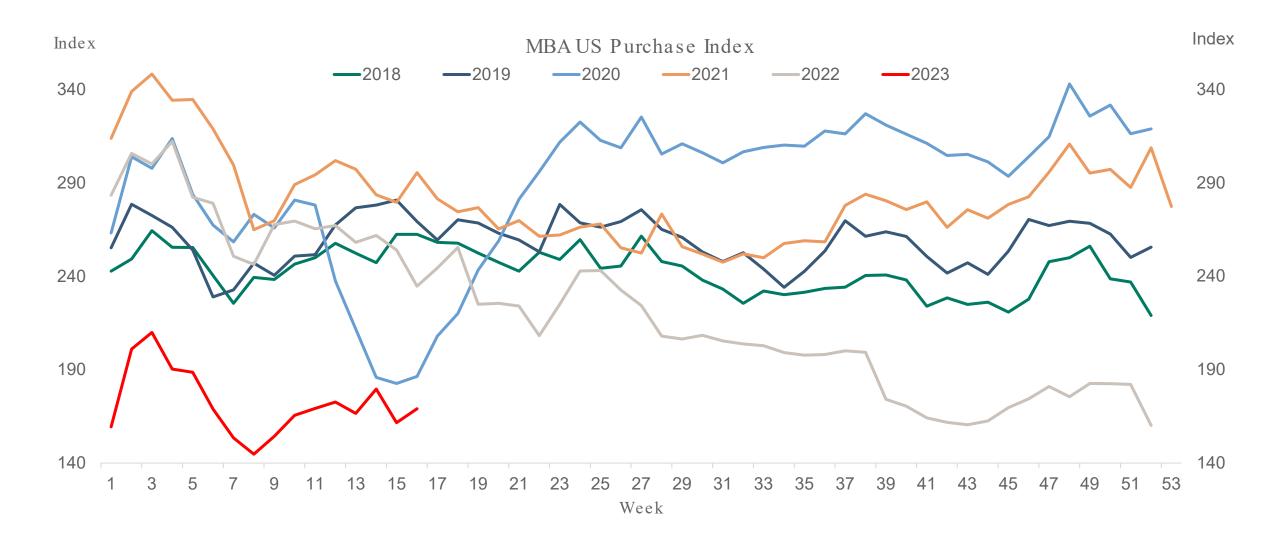
Source: Bloomberg, Apollo Chief Economist

Monthly mortgage payments on new mortgages still very high



Source: NAR, Haver Analytics, Apollo Chief Economist

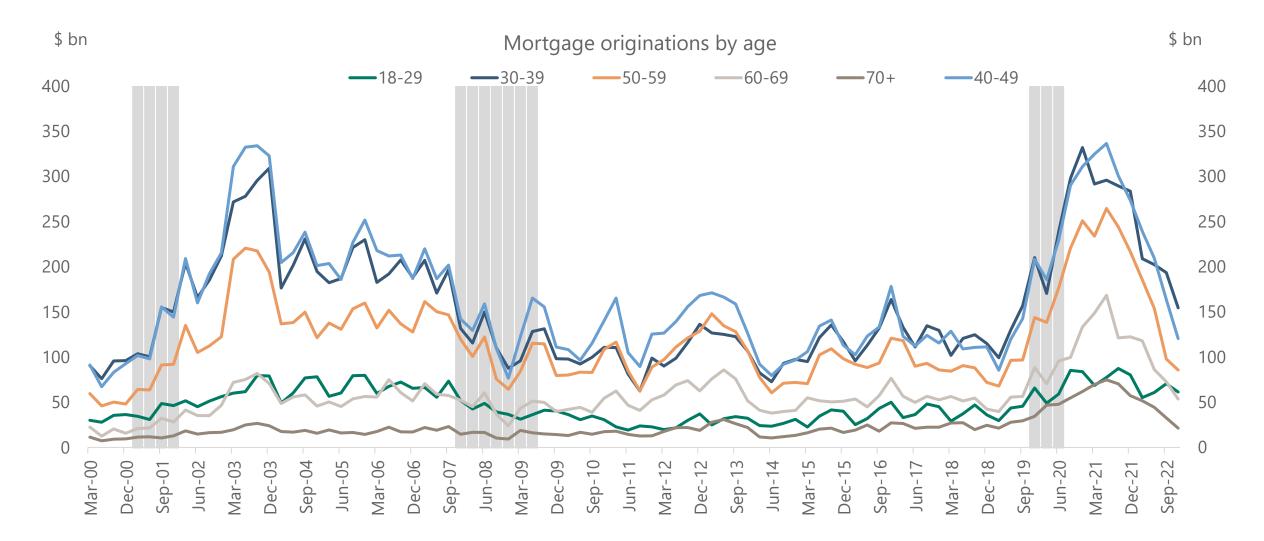
Mortgage purchase applications weaker than usual



Availability of mortgage credit continues to tighten

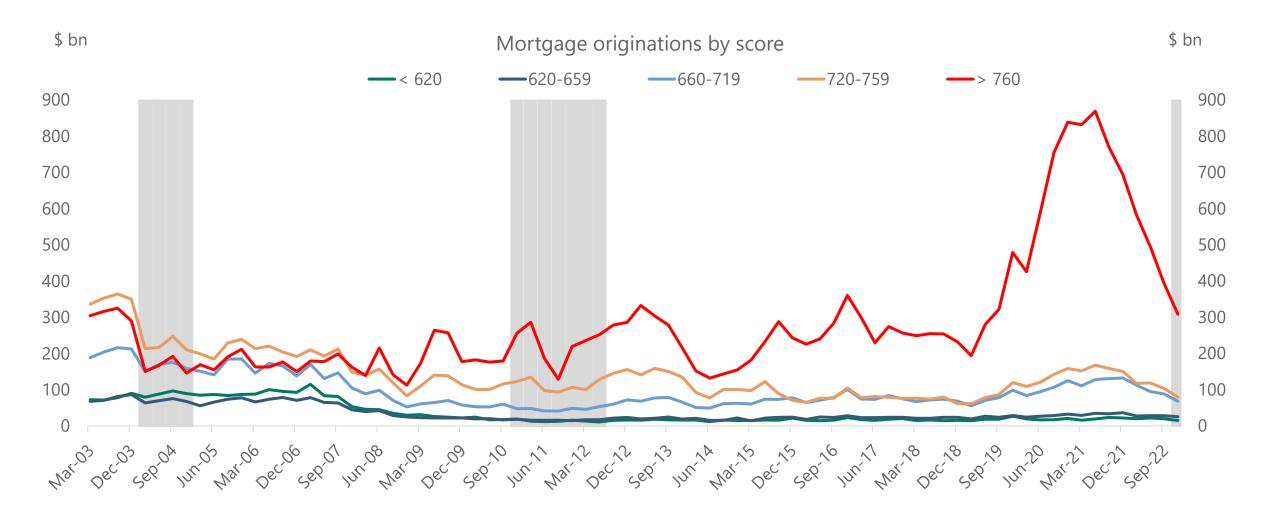


Mortgage originations coming down to pre-pandemic levels



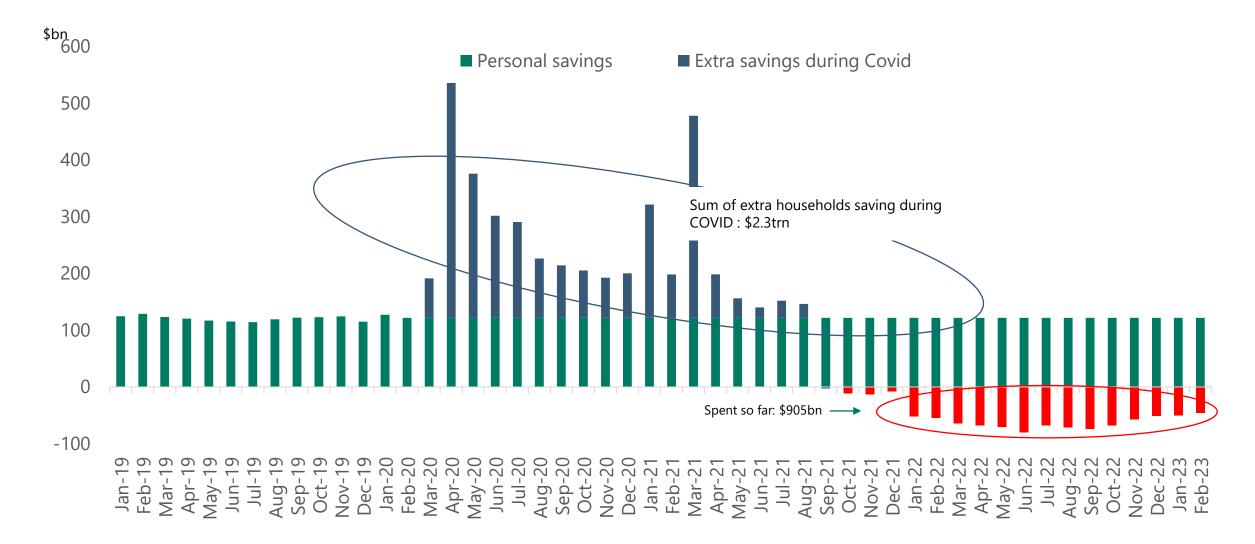
Source: NY Fed, Bloomberg, Apollo Chief Economist

Mortgage originations normalizing for households with high credit scores



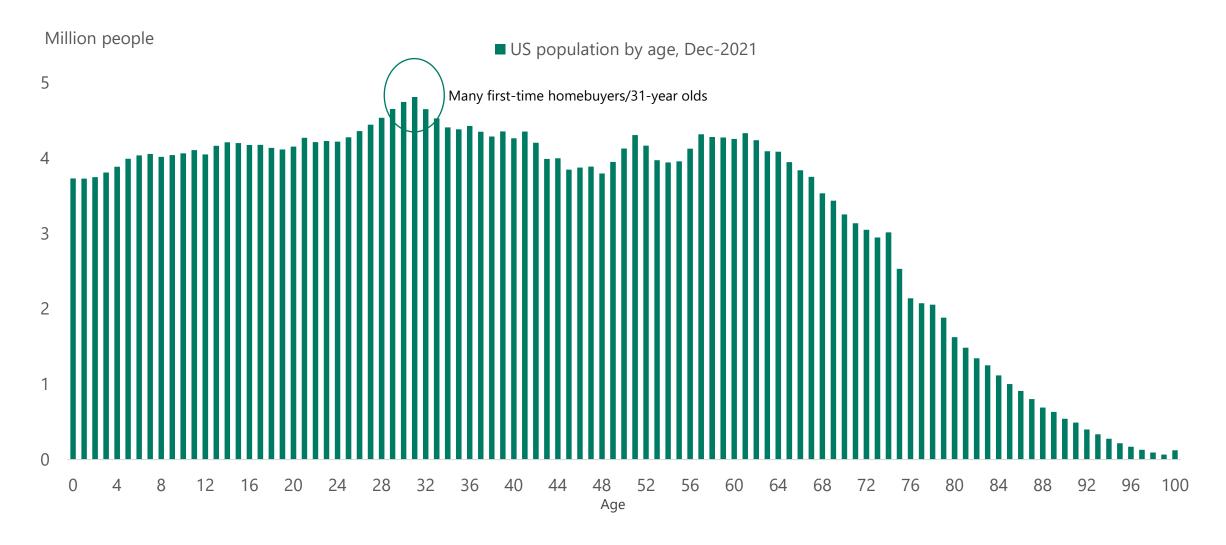
Source: NY Fed, Bloomberg, Apollo Chief Economist 36

Households are running down their savings, but still about \$1.7trn left



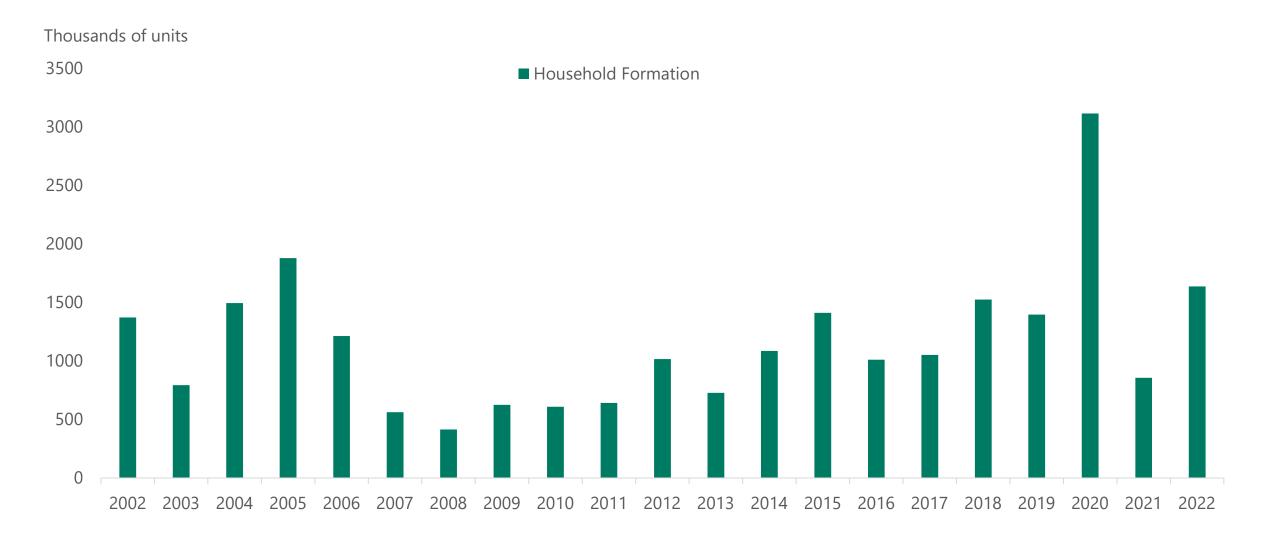
Note: Bloomberg, Apollo Chief Economist

Demographics are a tailwind to housing demand



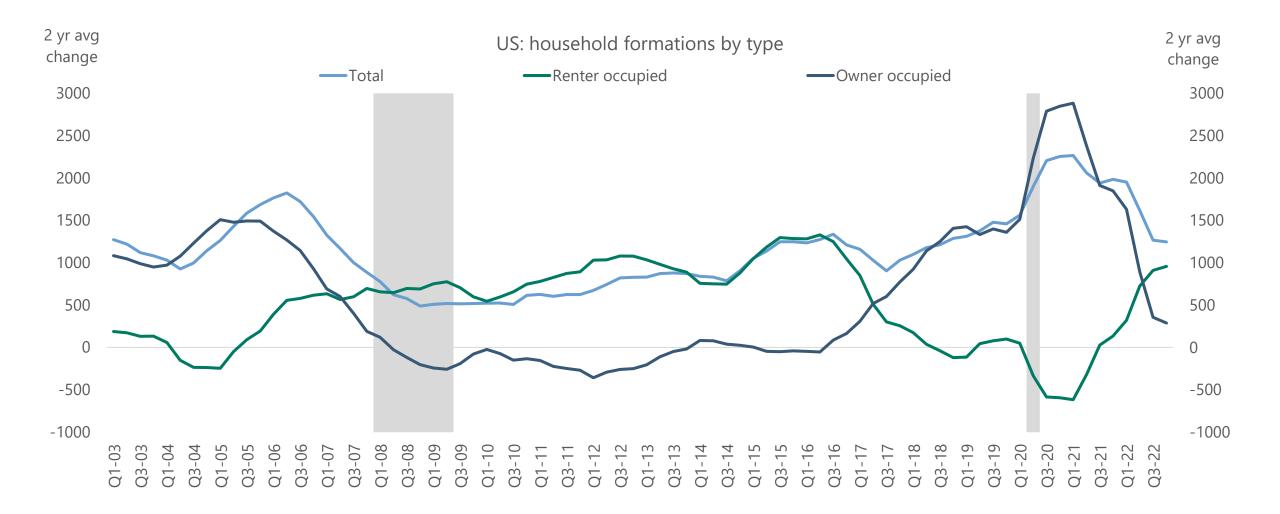
Source: UN, Haver, Apollo Chief Economist

Household formation rising



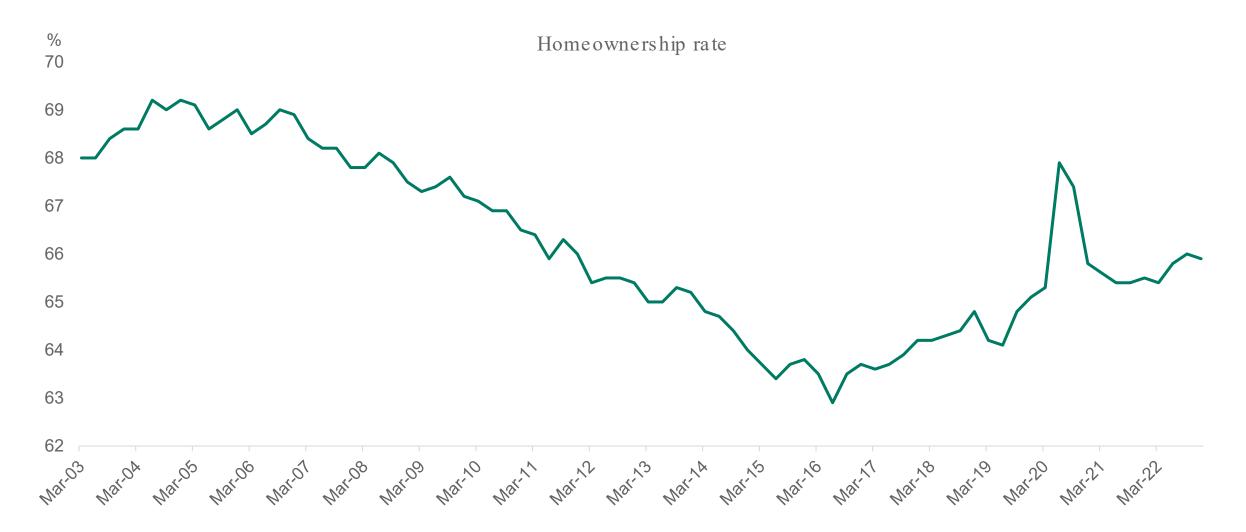
Source: Census Bureau, Haver, Apollo Chief Economist

The number of renter occupied housing units has been growing



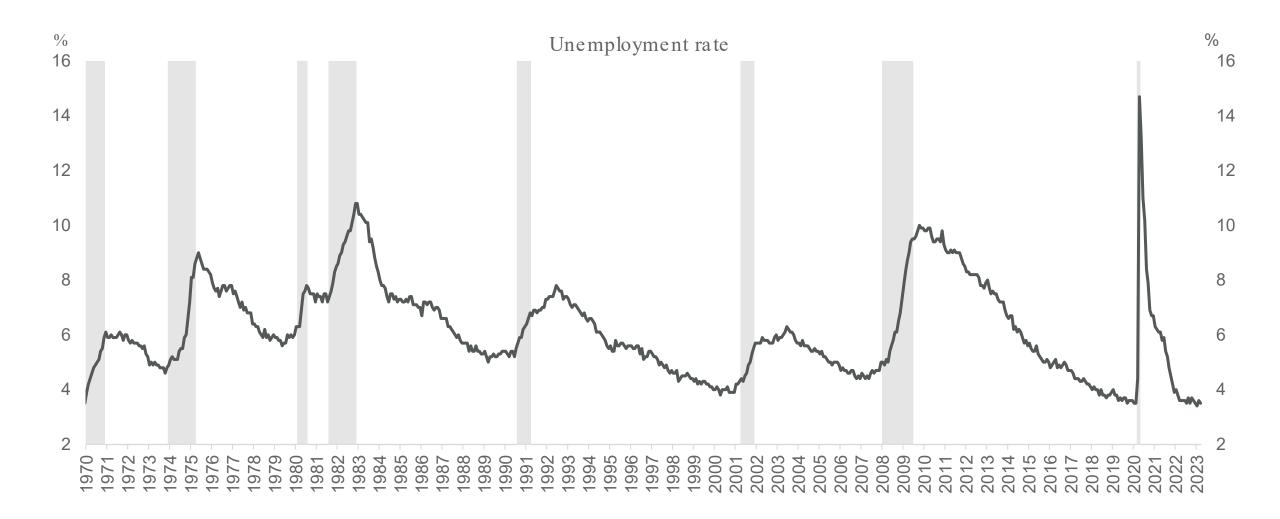
Source: Census Bureau, Haver, Apollo Chief Economist 40

Homeownership rate moving gradually higher



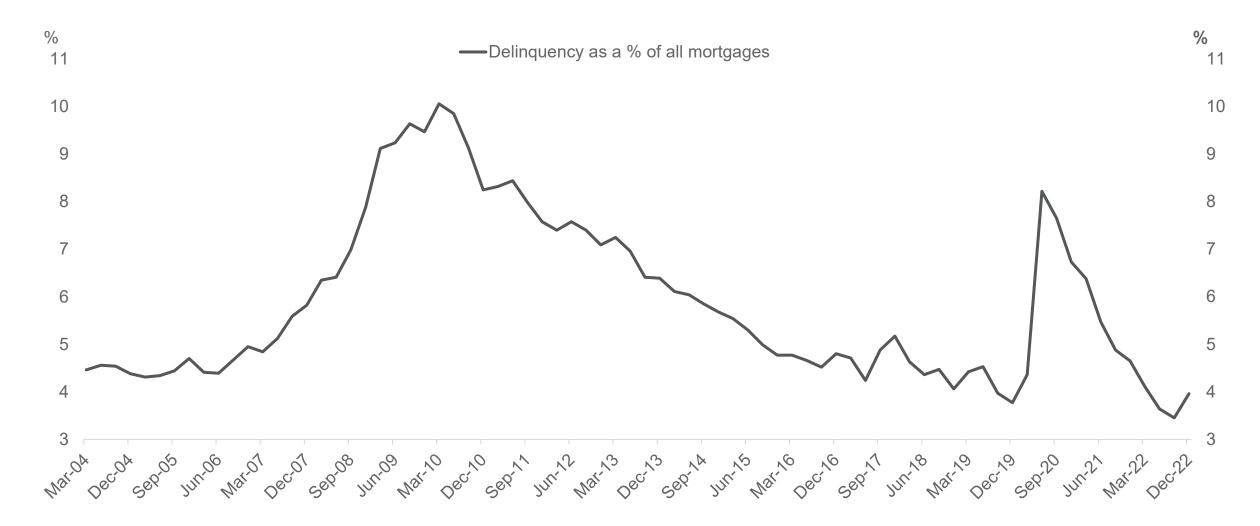
Source: Bloomberg, Apollo Chief Economist

Low unemployment is a significant tailwind to housing demand



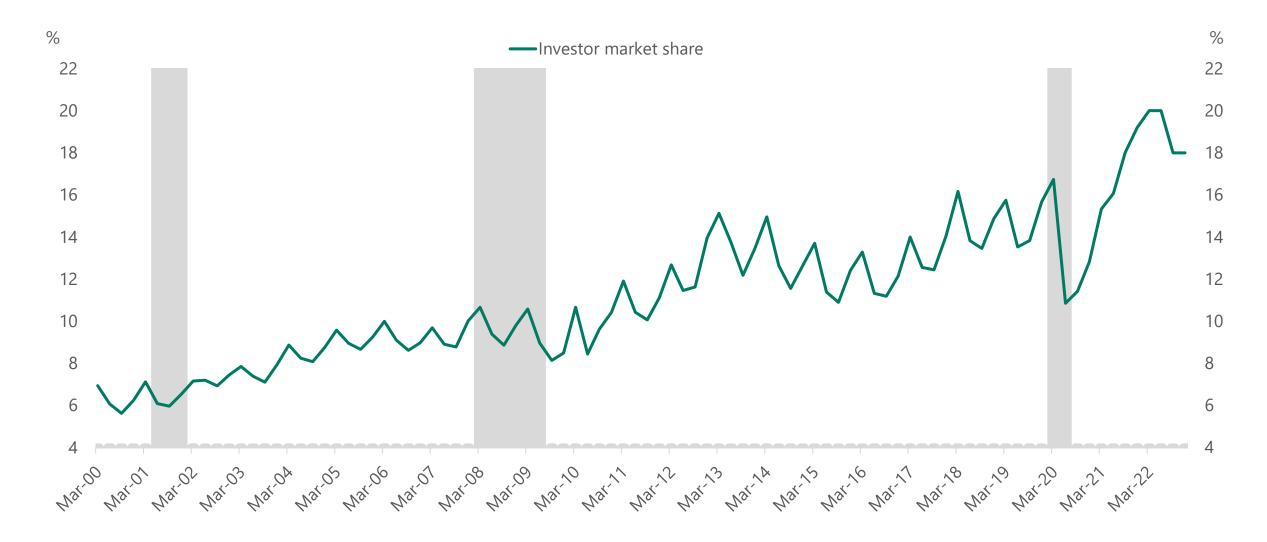
Source: BLS, Haver Analytics, Apollo Chief Economist 42

Delinquent mortgages still low

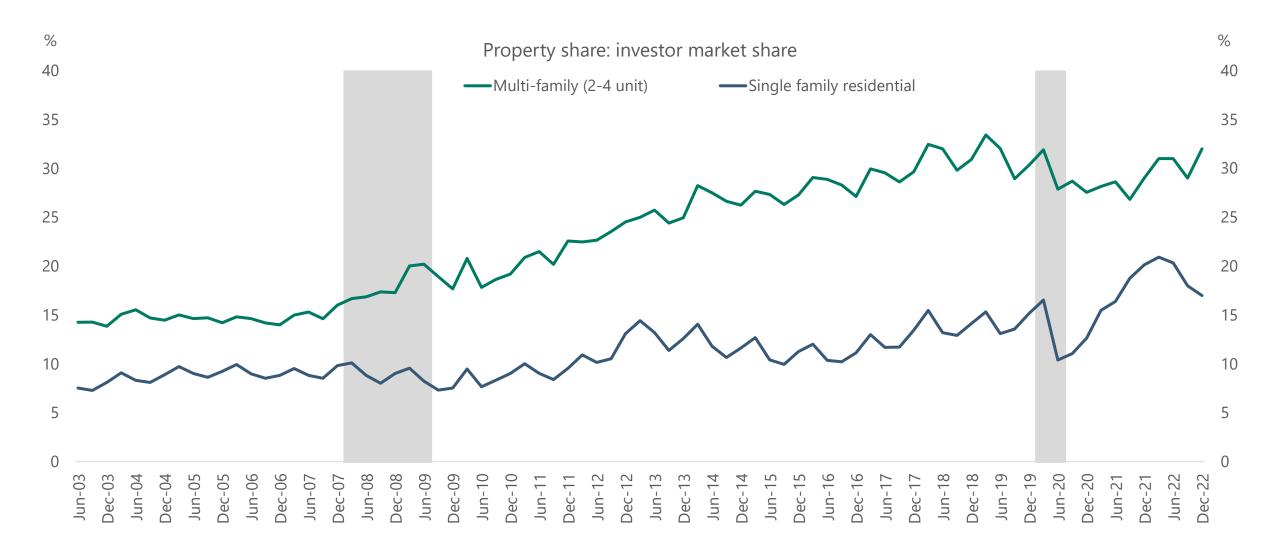


Source: Bloomberg, Apollo Chief Economist

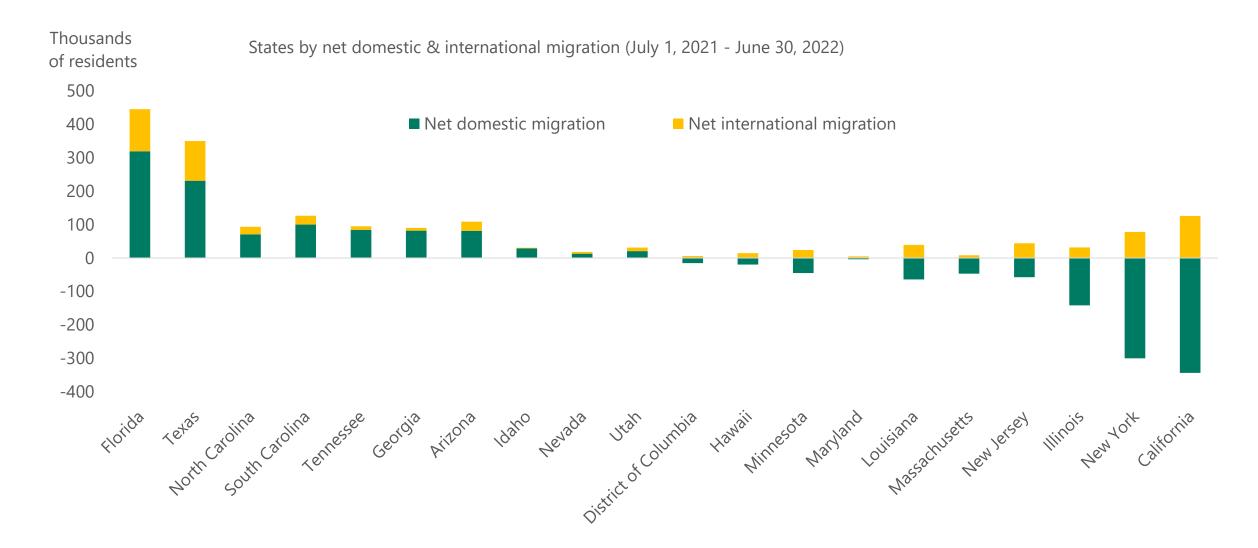
Investors accounting for 18% of all home purchases



Investor share of multi family trending higher



Migration out of California and migration into Florida during the pandemic

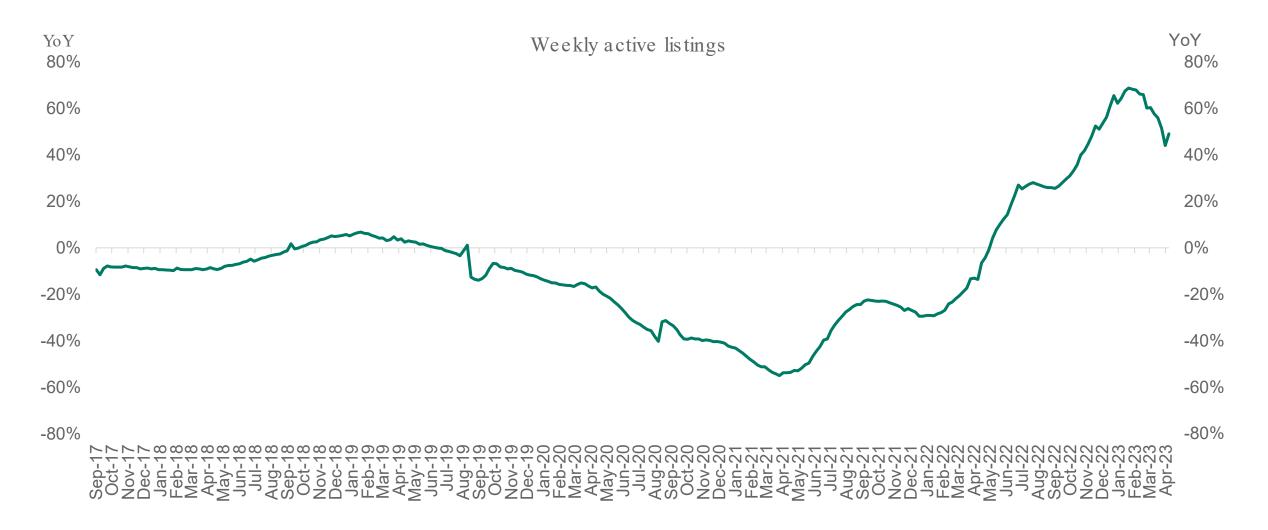


Source: Census Bureau, Apollo Chief Economist

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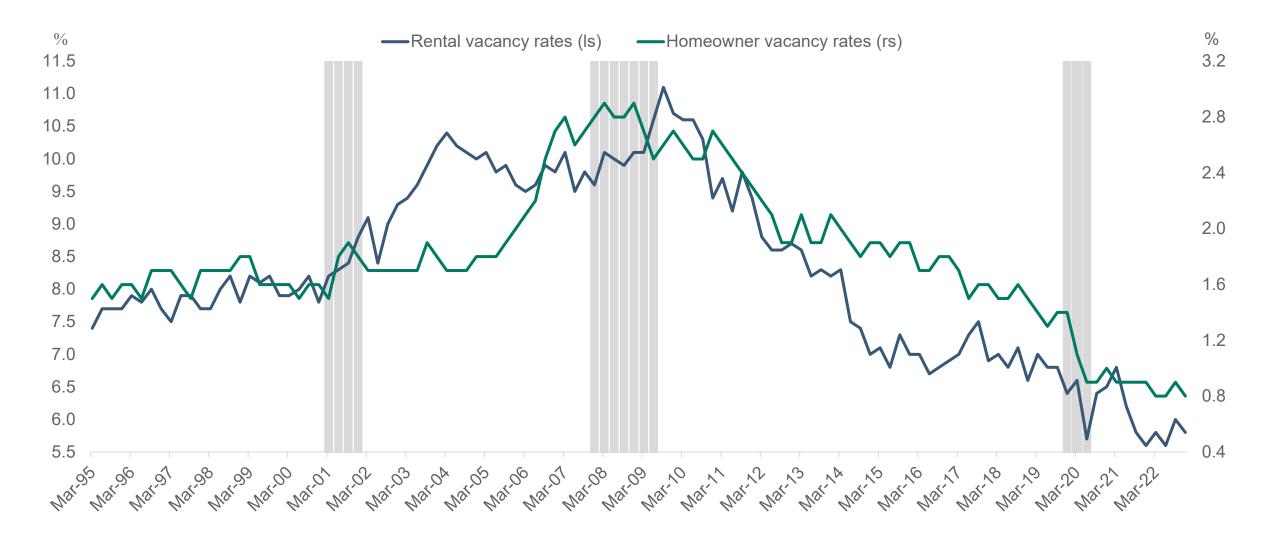
2) Housing Supply: Housing supply is low, construction near record-high levels

US housing inventory rising from low level



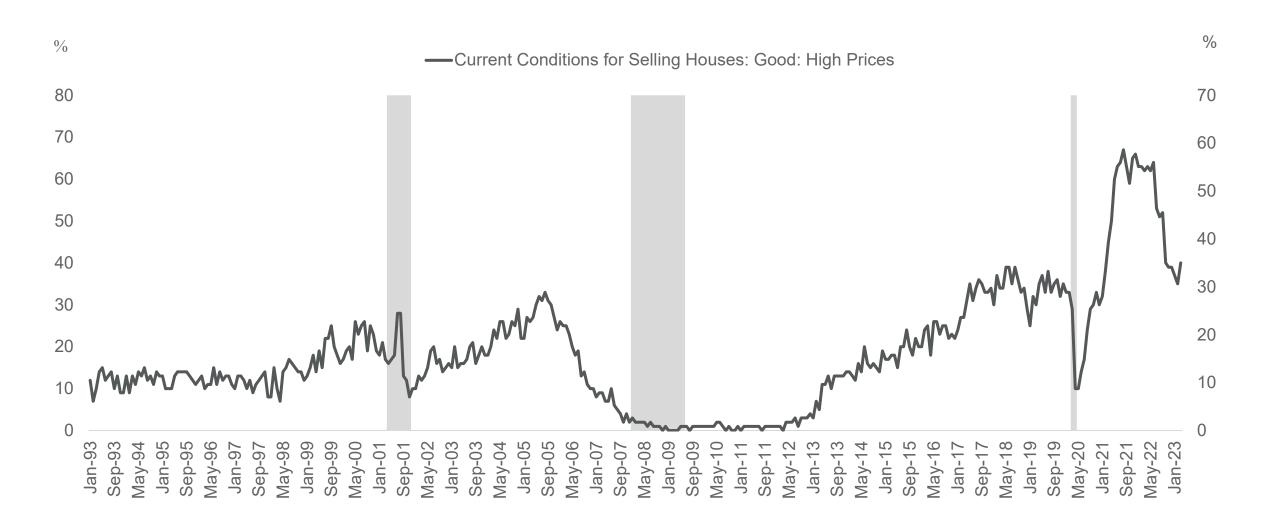
Source: Realtor.com, Apollo Chief Economist

Vacancy rates at record-low levels



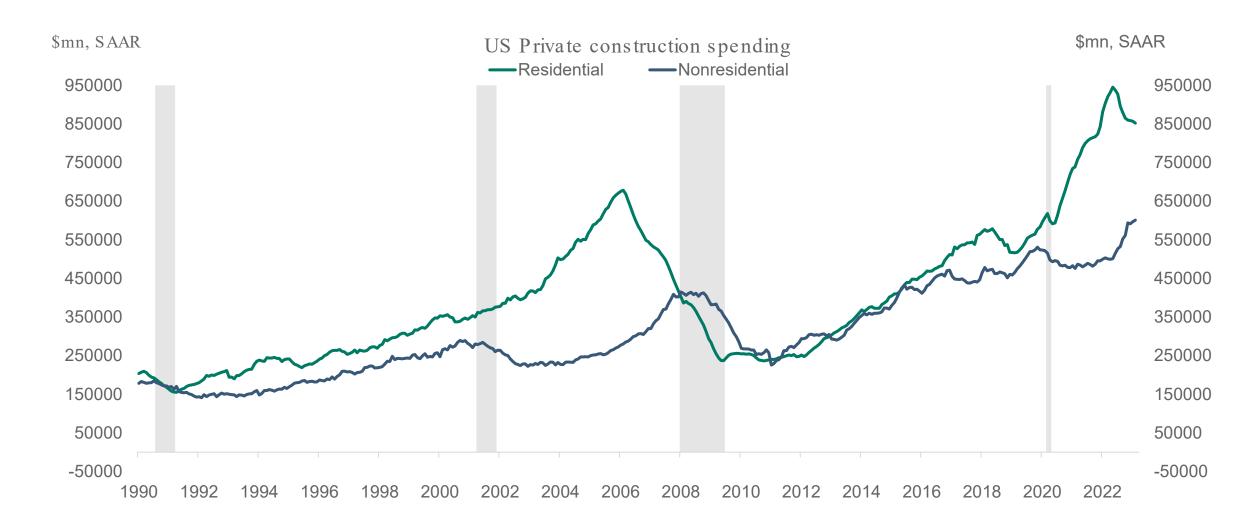
Source: Bloomberg, Apollo Chief Economist

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



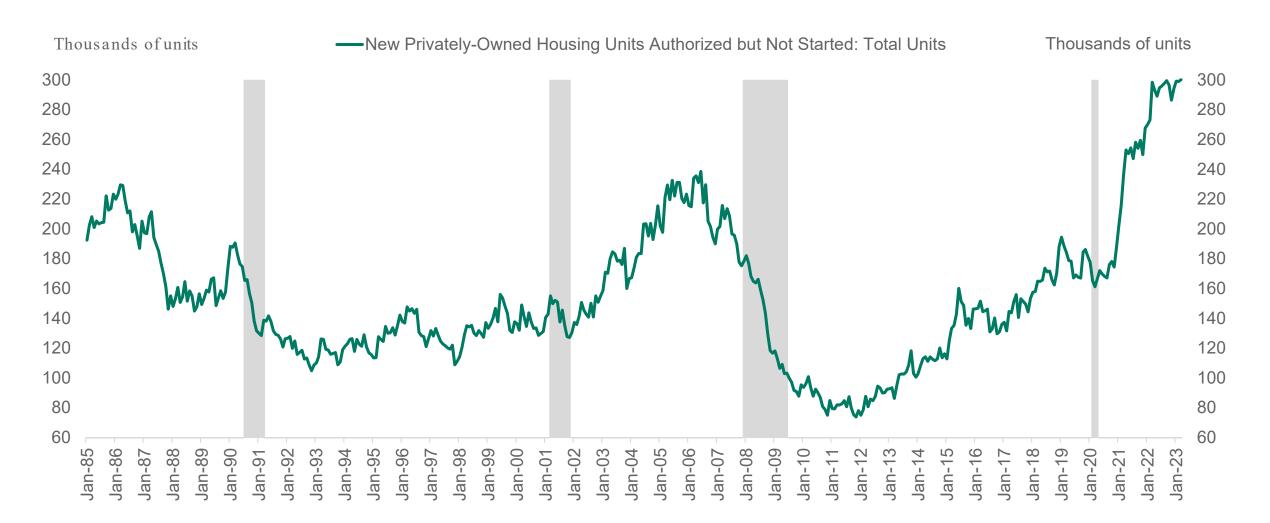
Source: University of Michigan, Apollo Chief Economist

Residential construction spending coming down from recent peak



Source: Census, Apollo Chief Economist

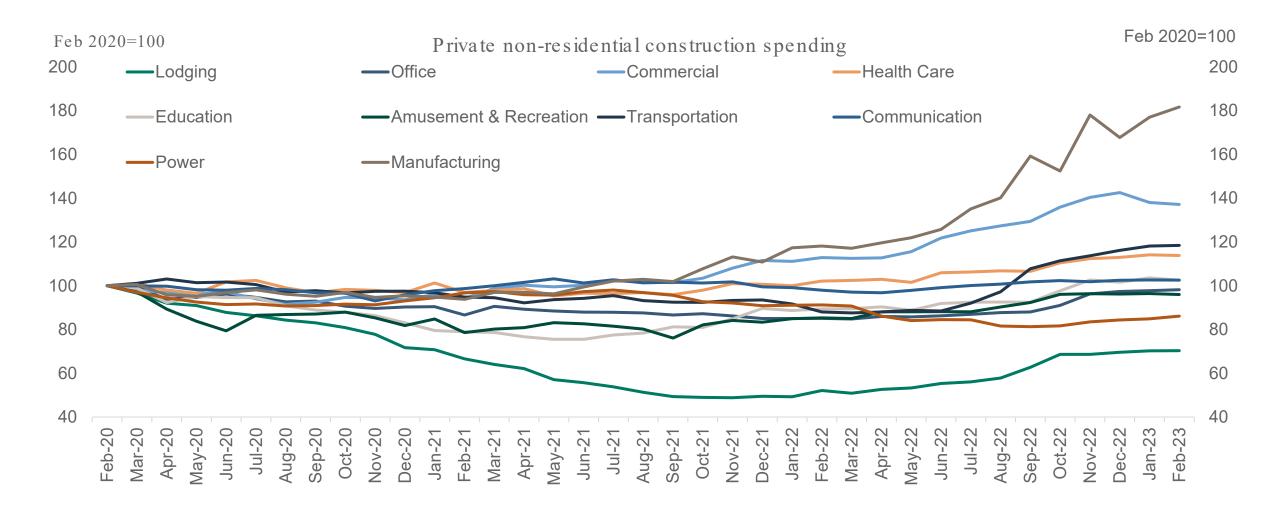
New housing units authorized near record highs



Source: FRED, Apollo Chief Economist

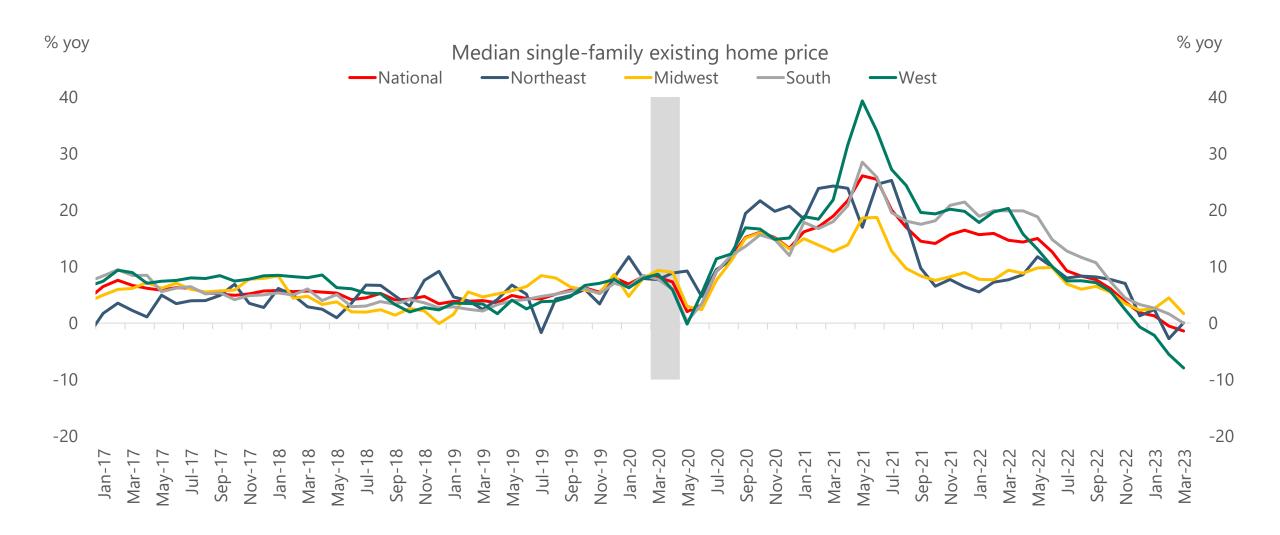
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The biggest decline in non-residential construction has been in lodging



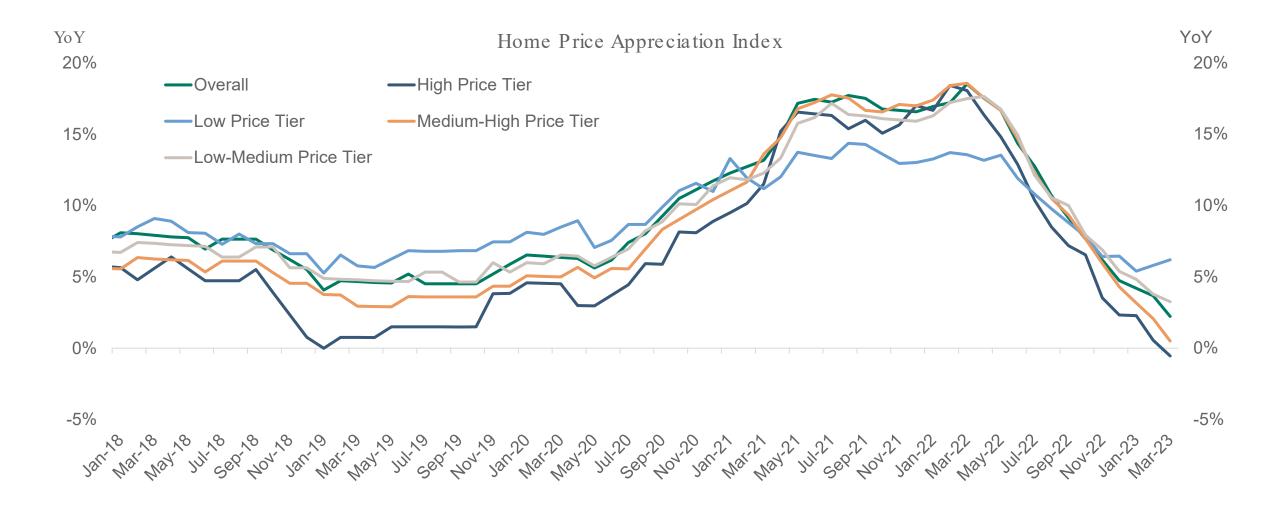
3) House Prices: Home price inflation slowing down

Home price inflation coming down

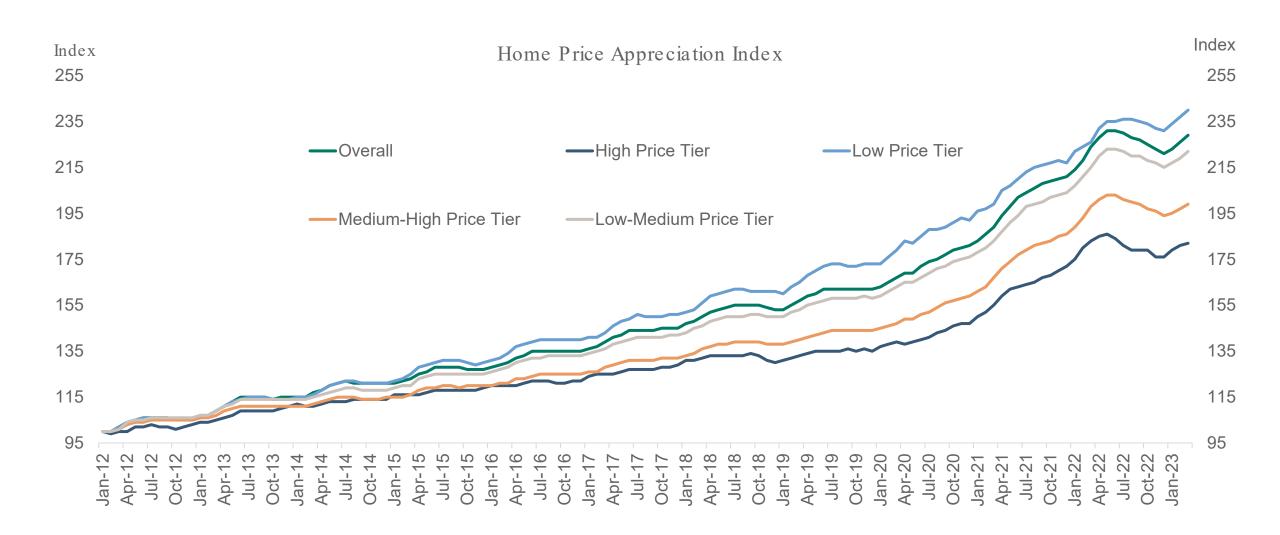


Source: NAR, Haver, Apollo Chief Economist

House price inflation slowing across price tiers

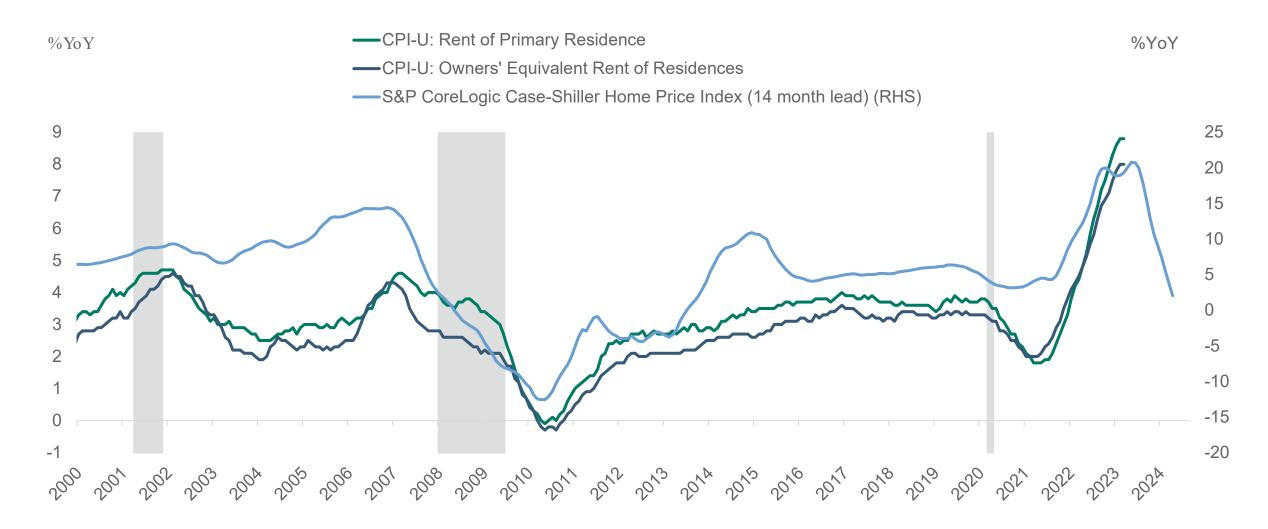


House price inflation slowing across price tiers



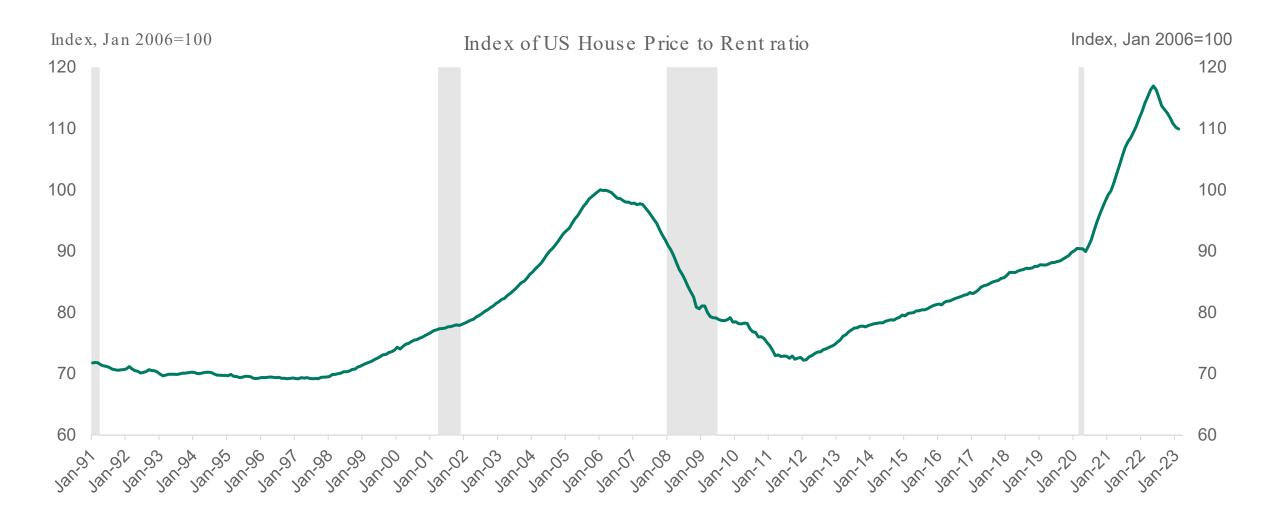
Source: American Enterprise Institute, Haver, Apollo Chief Economist

Home price inflation has peaked



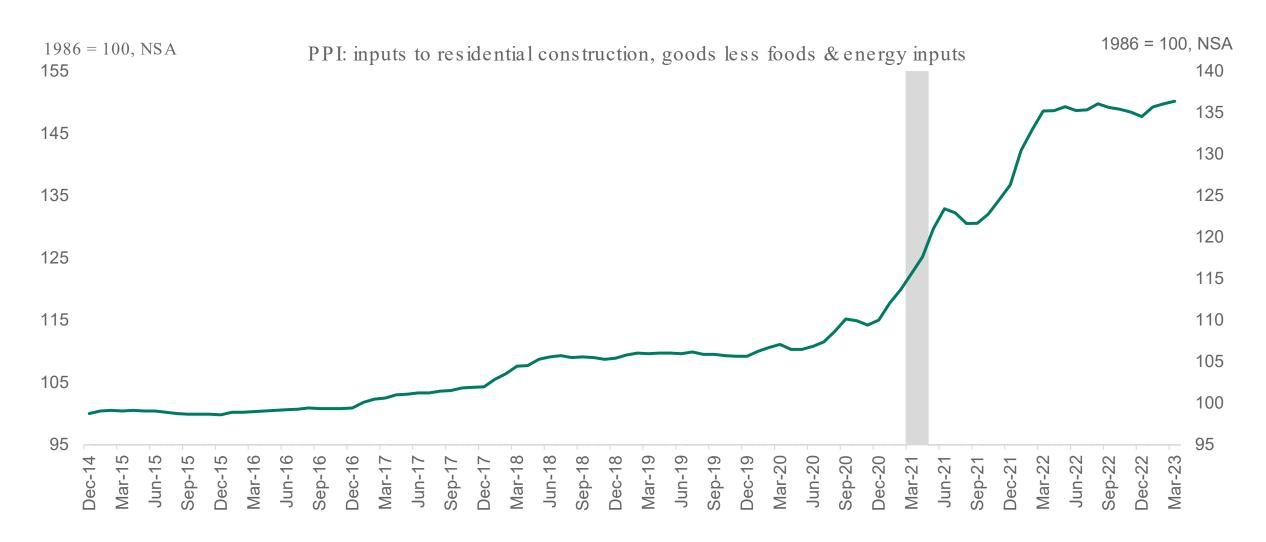
Source: Haver Analytics, BLS, S&P, Apollo Chief Economist

Home price to rent ratio significantly above 2006 levels



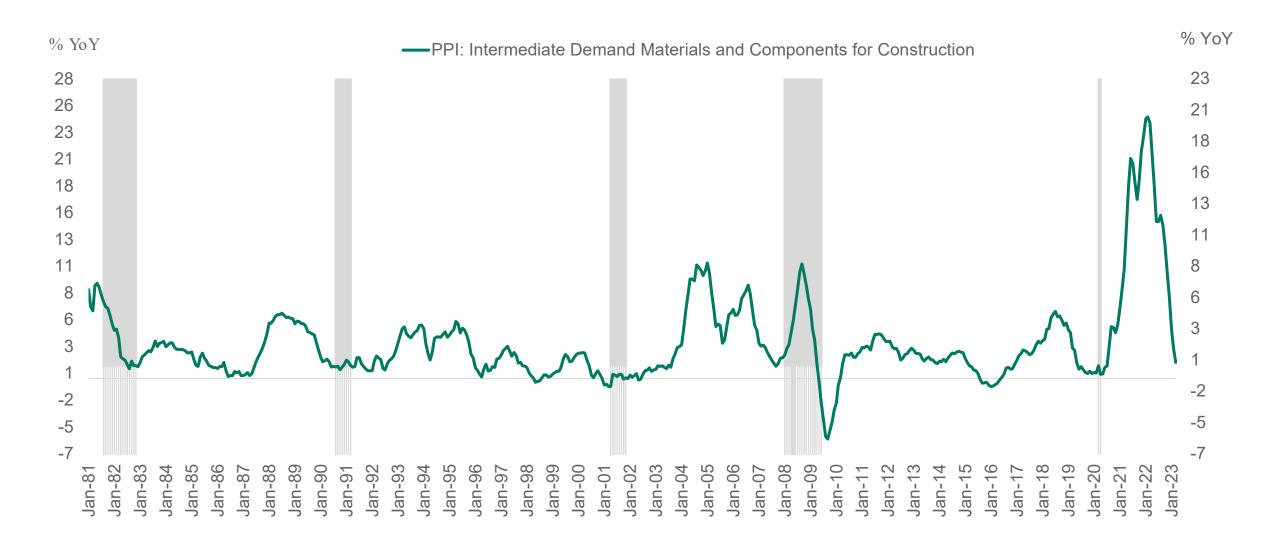
4) Housing Outlook: Elevated interest rates, high home prices, strong supply pipeline, and high building costs are risks to this housing cycle

Housing construction costs are high



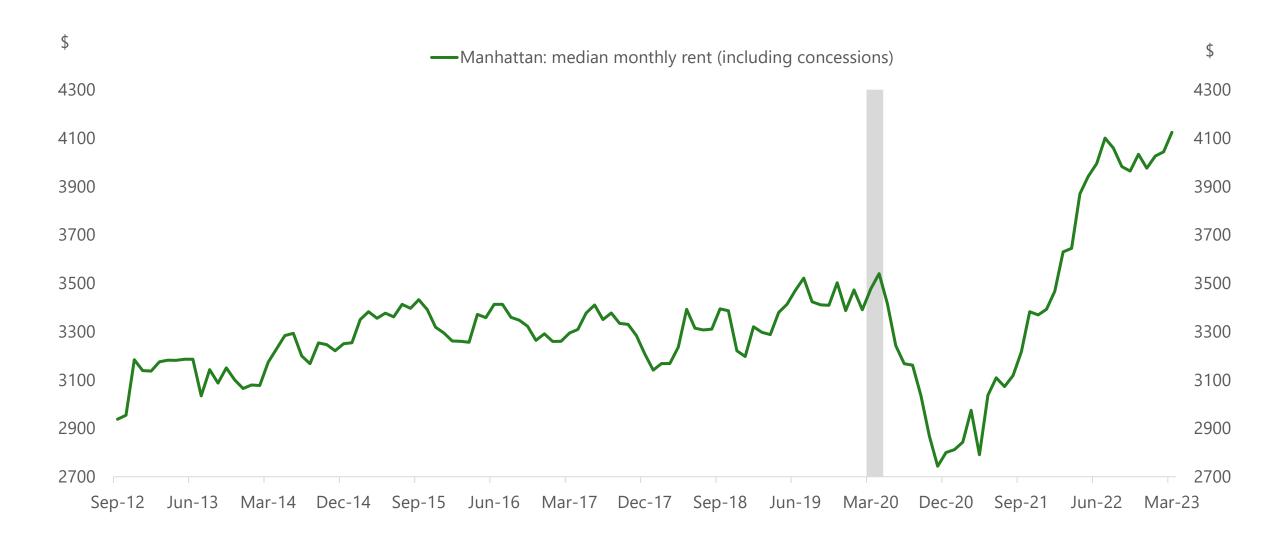
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Inflation in input costs for home builders declining sharply



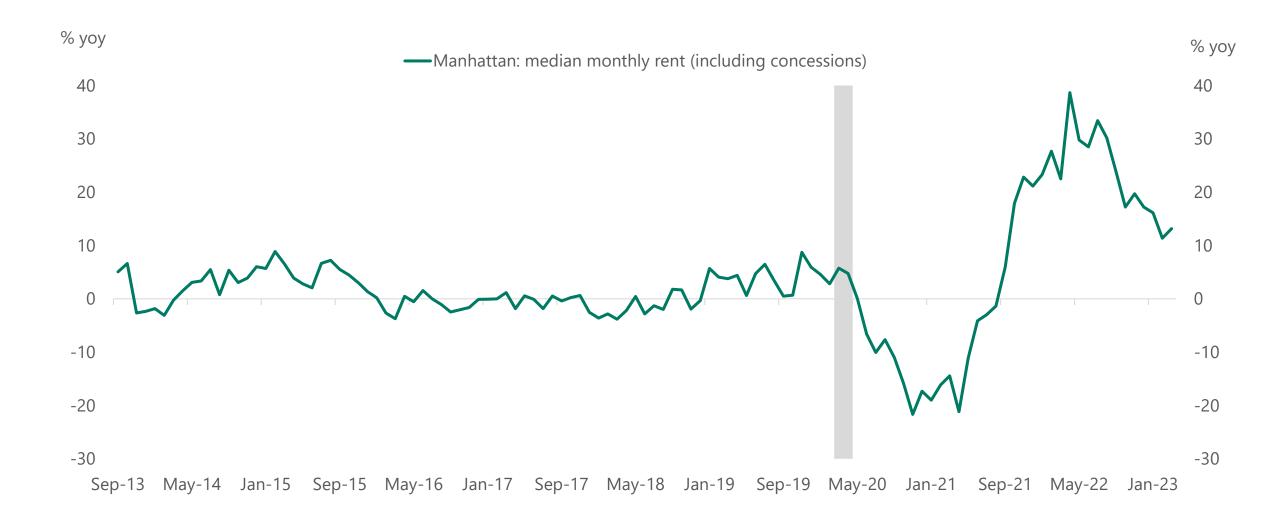
Source: Bureau of Labor Statistics, Apollo Chief Economist

Manhattan median rent at a new high at \$4124 in March 2023



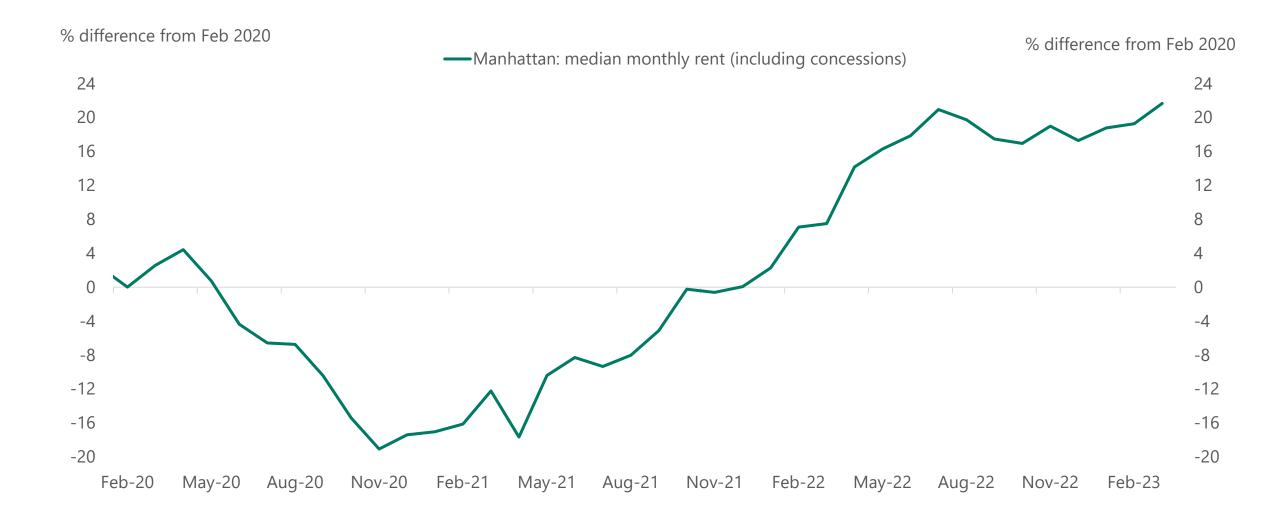
Source: Elliman, Apollo Chief Economist

Manhattan rents up 13% year-over-year



Source: Elliman, Apollo Chief Economist

Manhattan rents above pre-pandemic levels



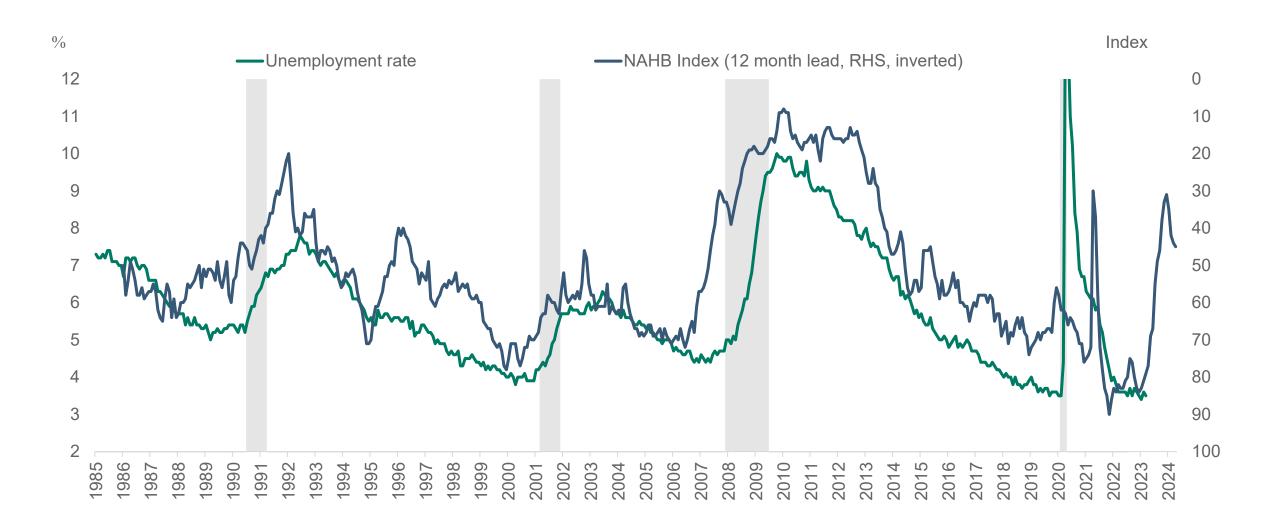
Source: Elliman, Apollo Chief Economist

Rising mortgage rates generally associated with lower home price inflation



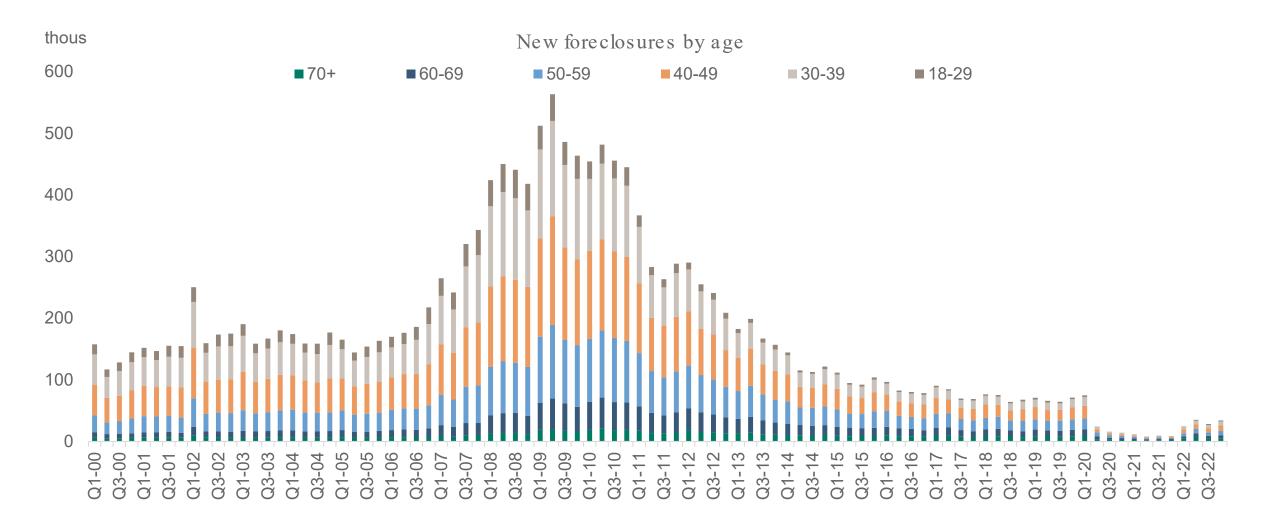
Source: FRED, Apollo Chief Economist

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

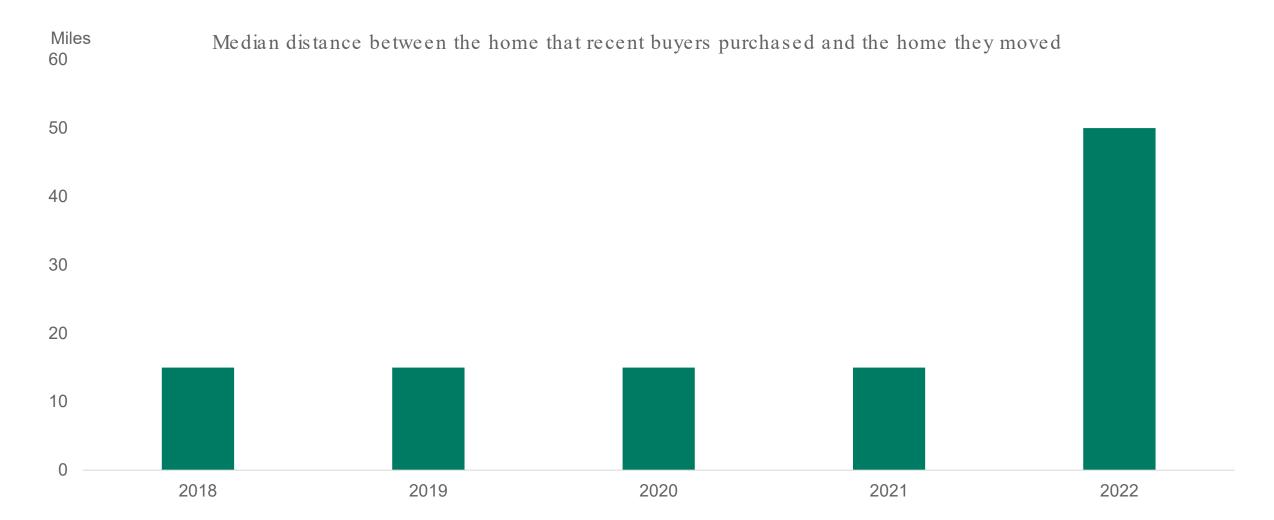


Source: NAHB, BLS, Bloomberg, Apollo Chief Economist

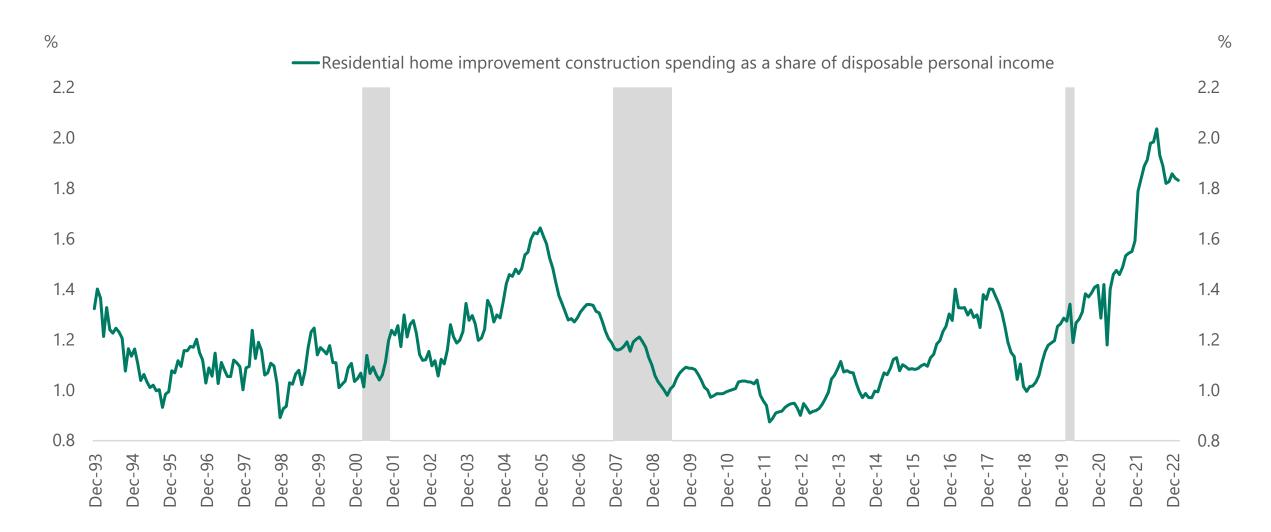
New foreclosures by age



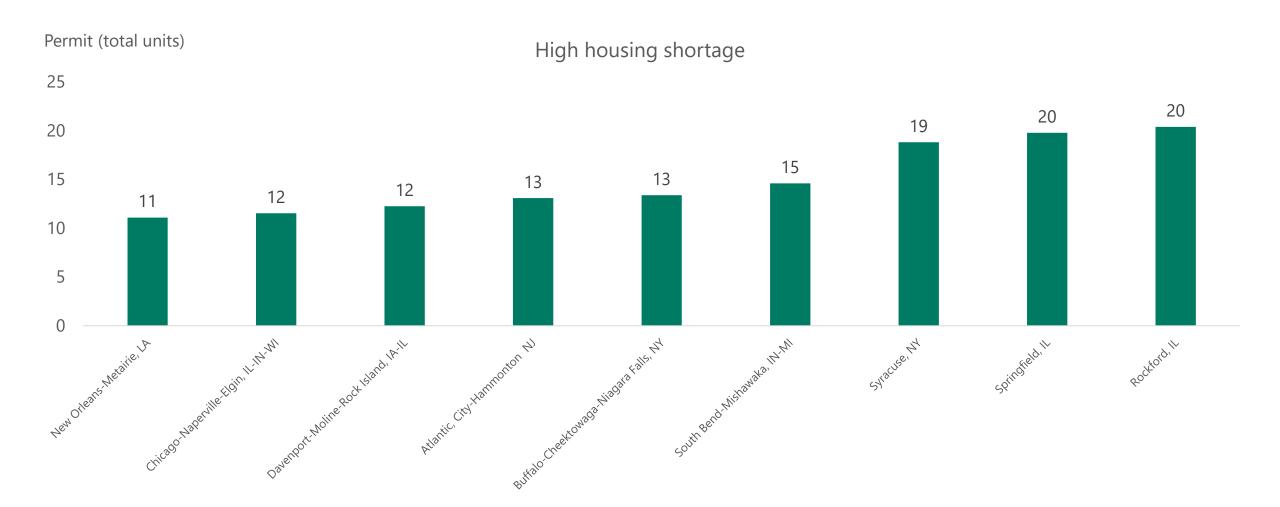
Median distance between the home that recent buyers purchased and the home they moved from at 50 miles in 2022



Home improvement spending near all-time high levels

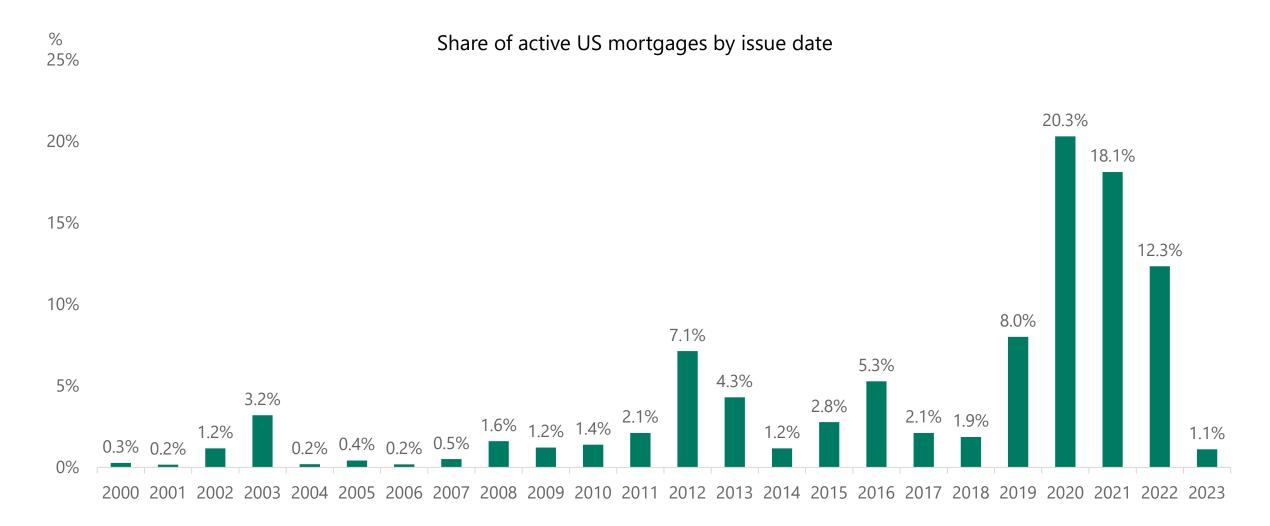


Areas that need to build more houses in order to keep up with the increased demand



Source: NAR, Apollo Chief Economist

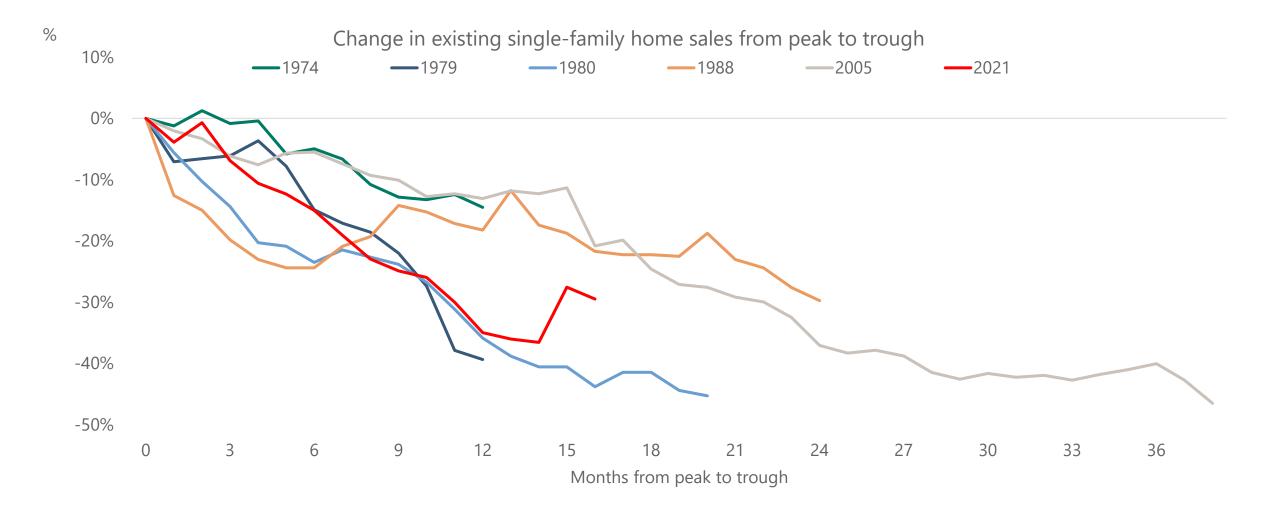
60% of all mortgages outstanding were issued after 2018





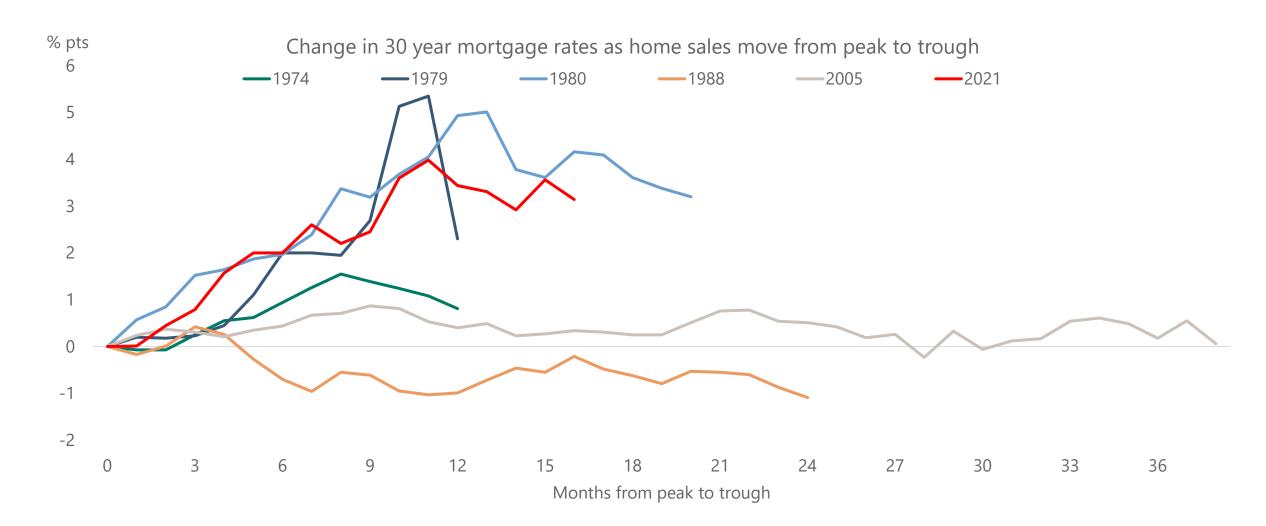
Comparing the current housing slowdown to previous housing slowdowns

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

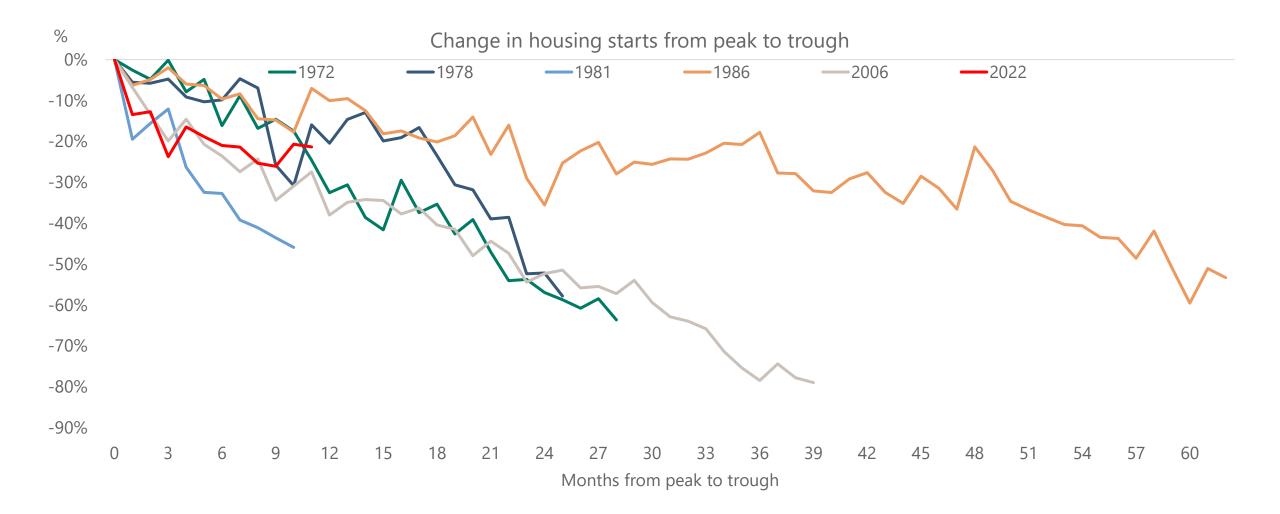


Source: NAR, Haver Analytics, Apollo Chief Economist

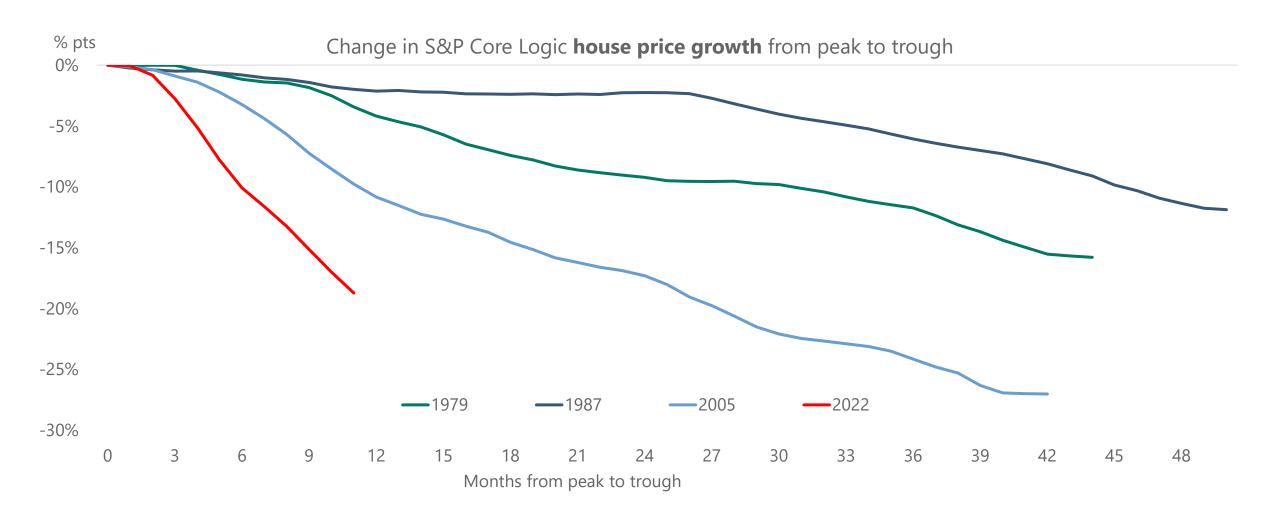
The current rise in mortgage rates is similar to what we saw during the Volcker disinflation



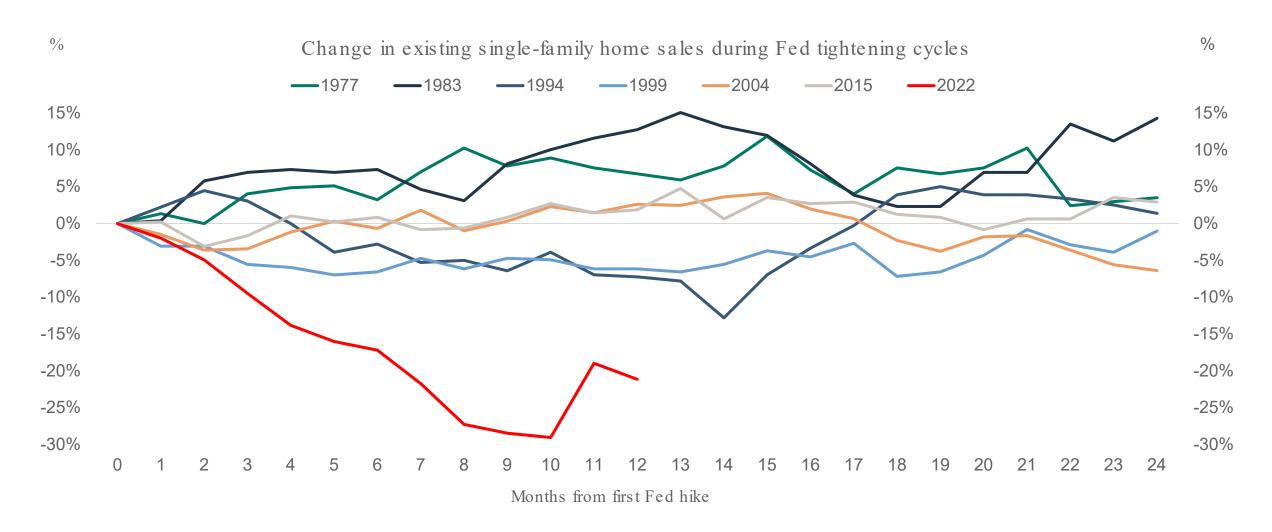
The current decline in housing starts follows pattern of previous slowdowns



The current slowdown in home price inflation is faster than usual

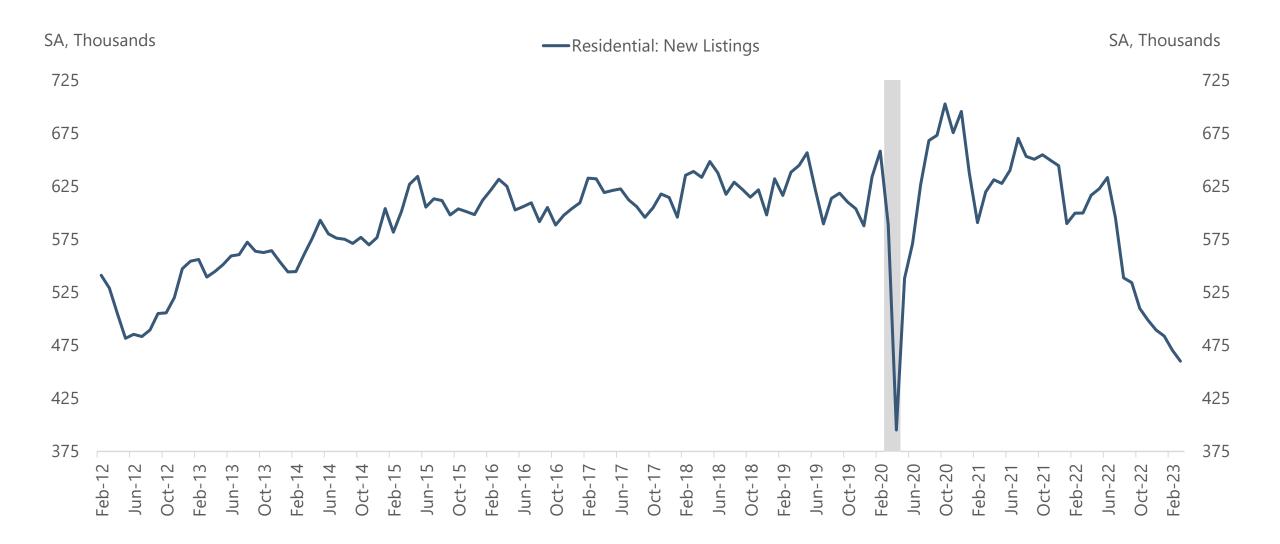


This is the fastest Fed-driven housing slowdown on record



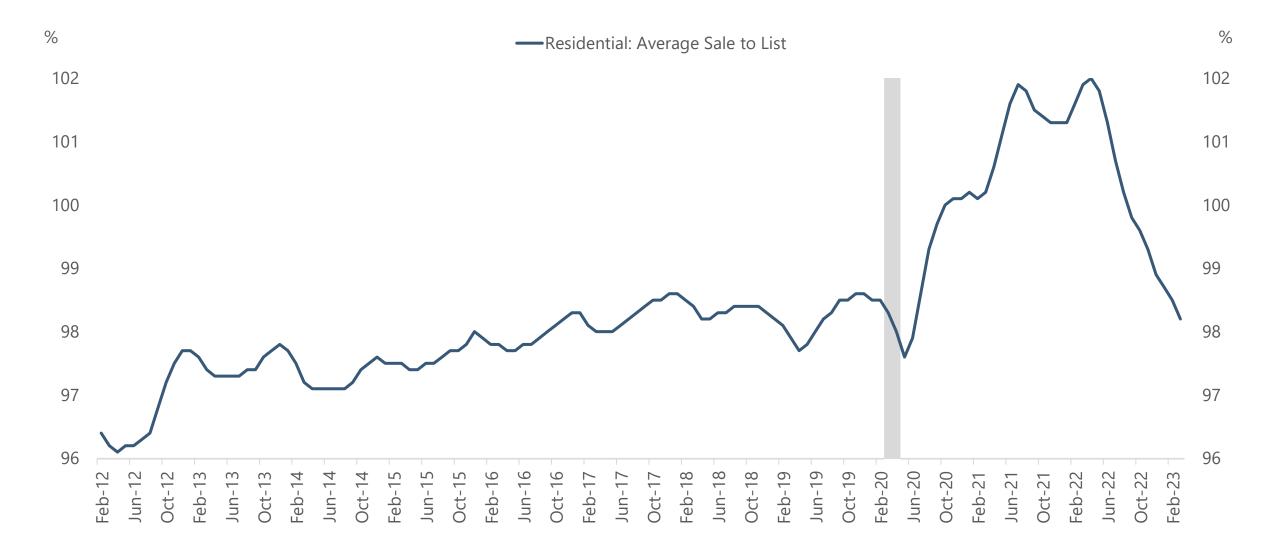
Source: NAR, Haver Analytics, Apollo Chief Economist

Fewer people listing their home for sale in a down market



Source: Redfin, Haver Analytics, Apollo Chief Economist.

Post Covid, homes were sold for less than the list price





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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. 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.