APOLLO

Outlook for public and private markets

Torsten Slok, Ph.D. | Chief Economist | tslok@apollo.com

Apollo Global Management

September 2023

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.

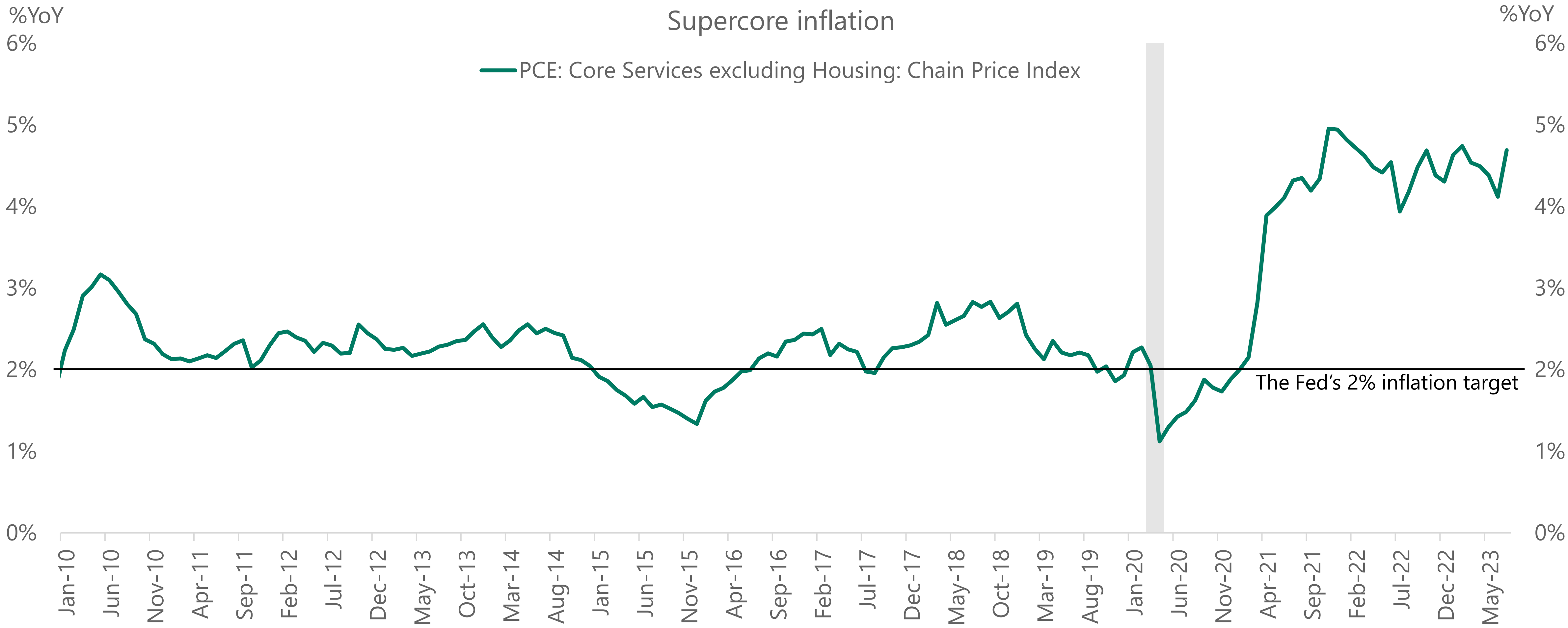
Certain information contained herein may be "forward-looking" in nature. Due to various risks and uncertainties, actual events or results may differ materially from those reflected or contemplated in such forward-looking information. As such, undue reliance should not be placed on such information. Forward-looking 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.

Ten downside risks to the US economic outlook

1. Households running out of excess savings
2. Student loan payments restarting
3. Delinquency rates rising for credit cards and auto loans
4. Default rates rising for HY and loans
5. Interest coverage ratios falling for IG and HY
6. Banking sector loan growth slowing rapidly
7. Oil prices rising
8. China, Japan, and Europe slowing
9. Long-term interest rates rising for non-economic reasons
10. Higher interest payments for the US government

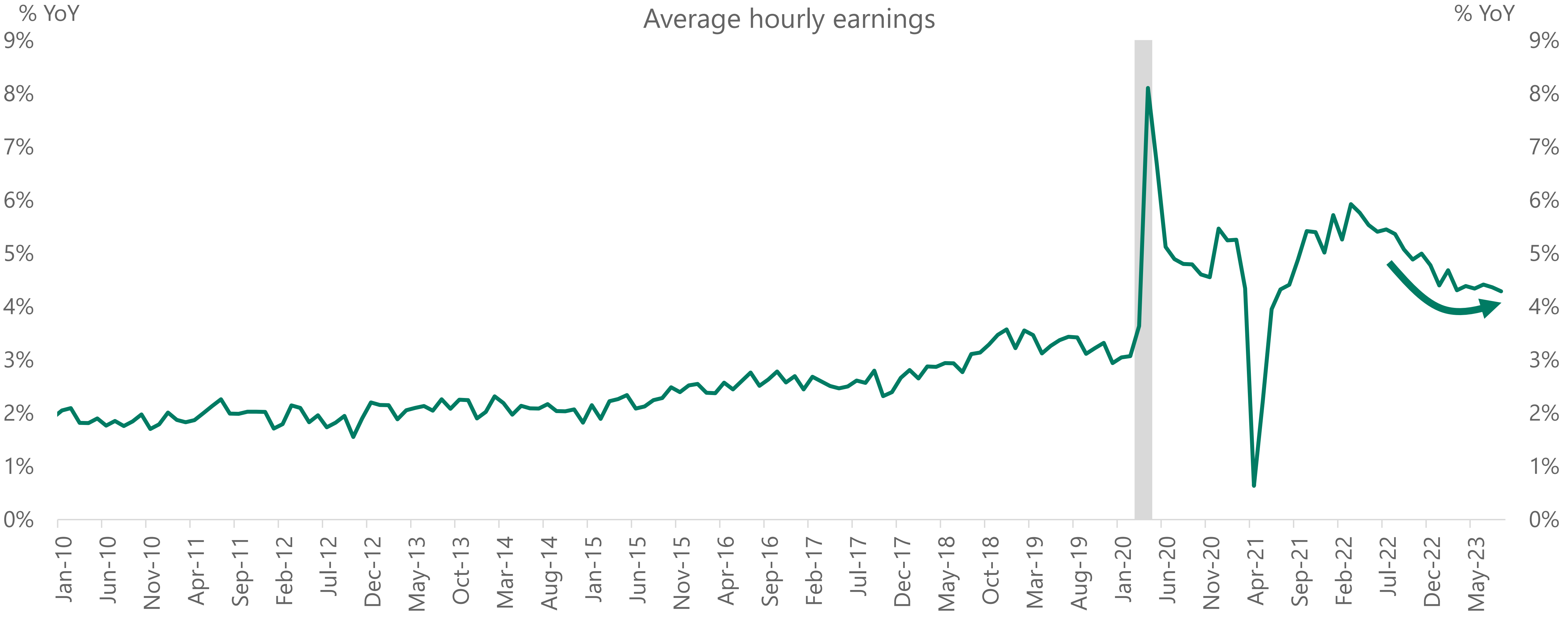
Source: Apollo Chief Economist

Inflation: Too early to declare victory



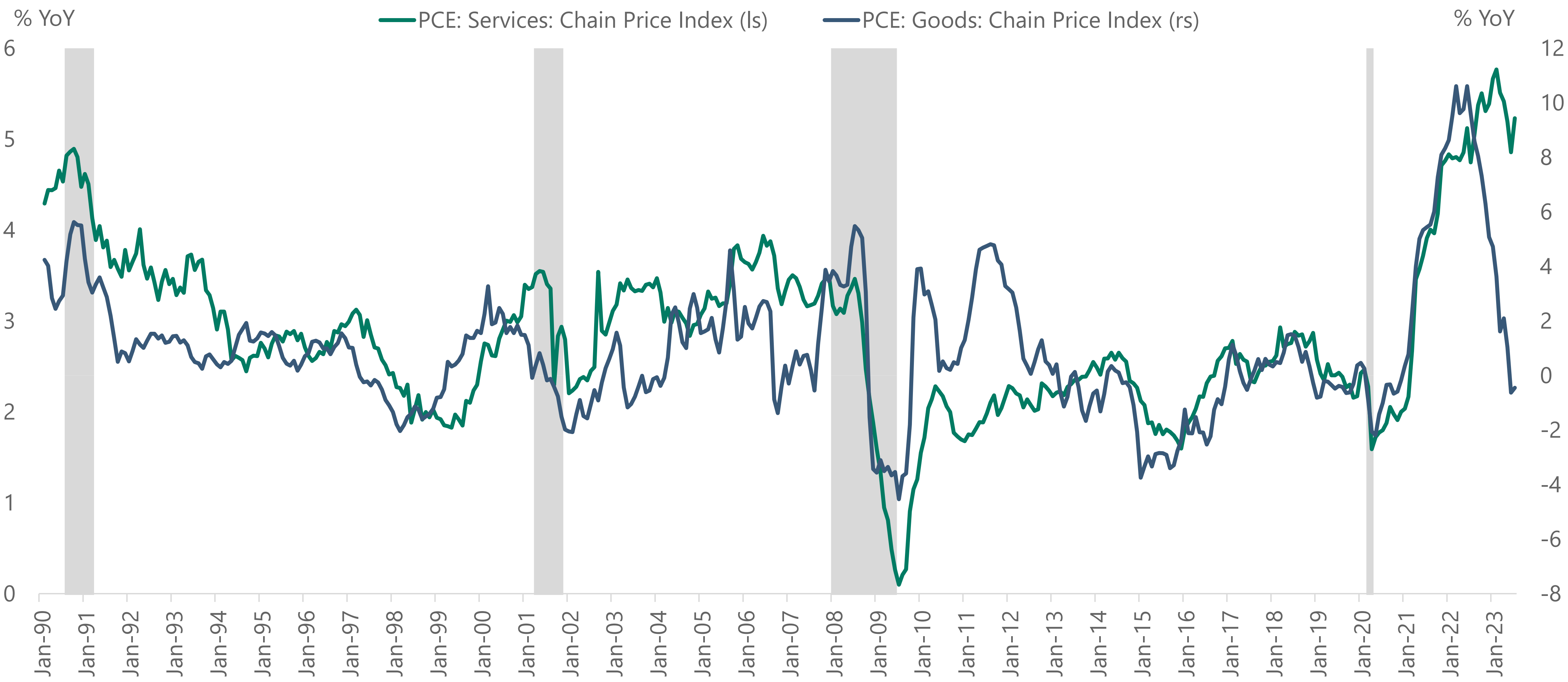
Source: BEA, Haver Analytics, Apollo Chief Economist

Inflation: Too early to declare victory



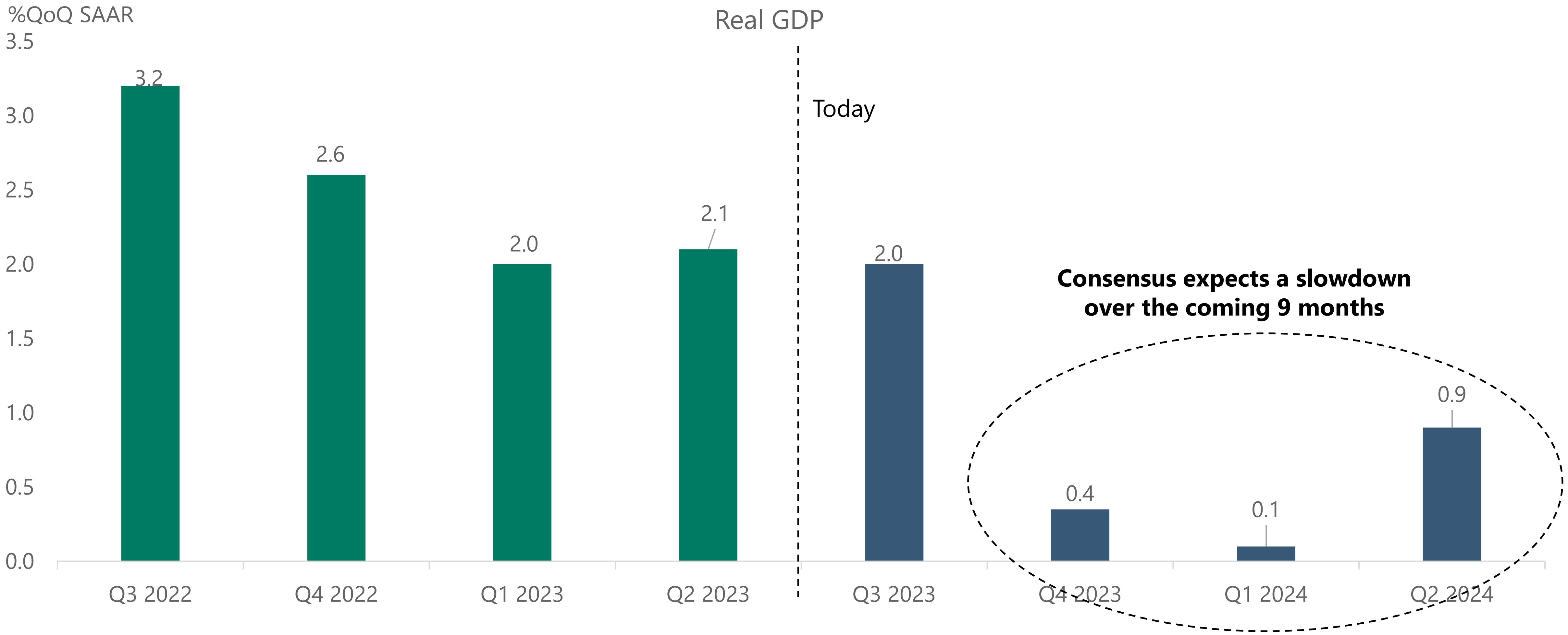
Source: BLS, Haver Analytics, Apollo Chief Economist

Goods inflation trending down, service sector inflation still high



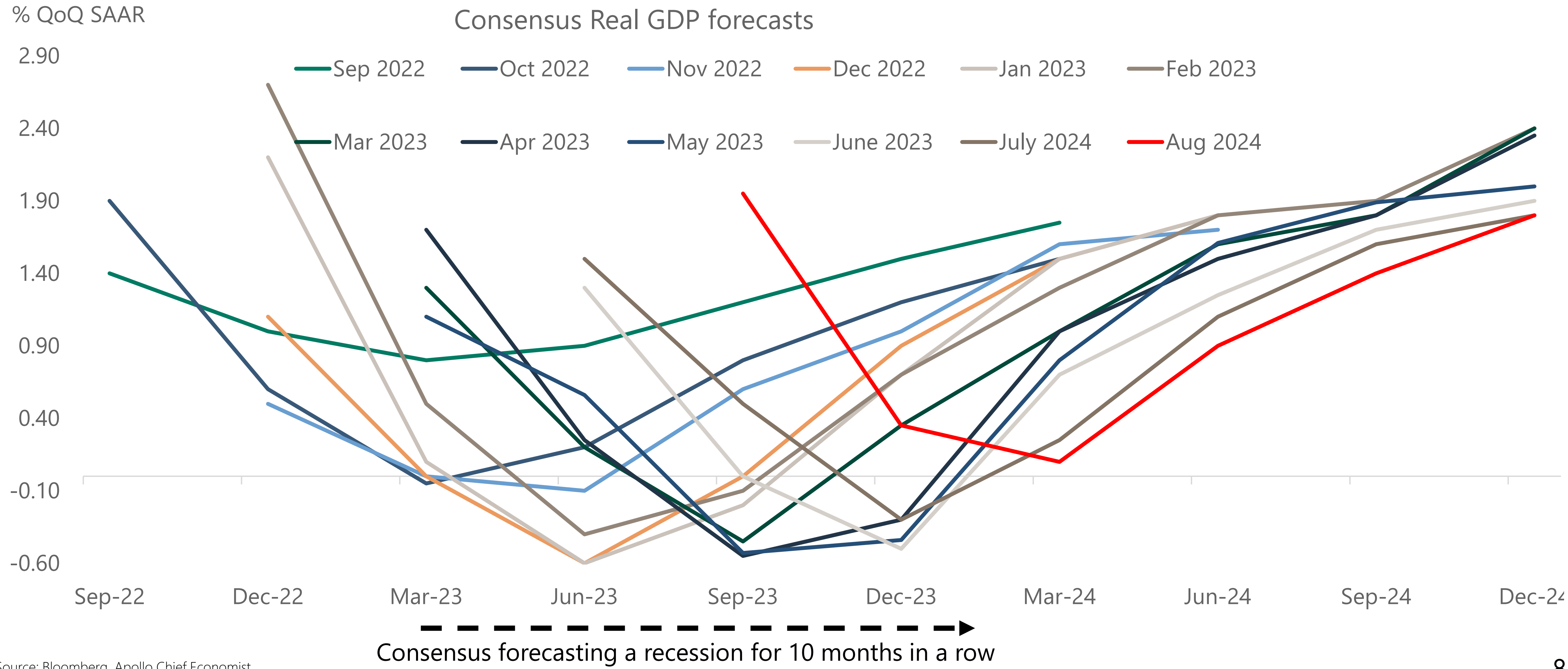
Source: BEA, Haver, Apollo Chief Economist

The consensus expects growth to continue to slow



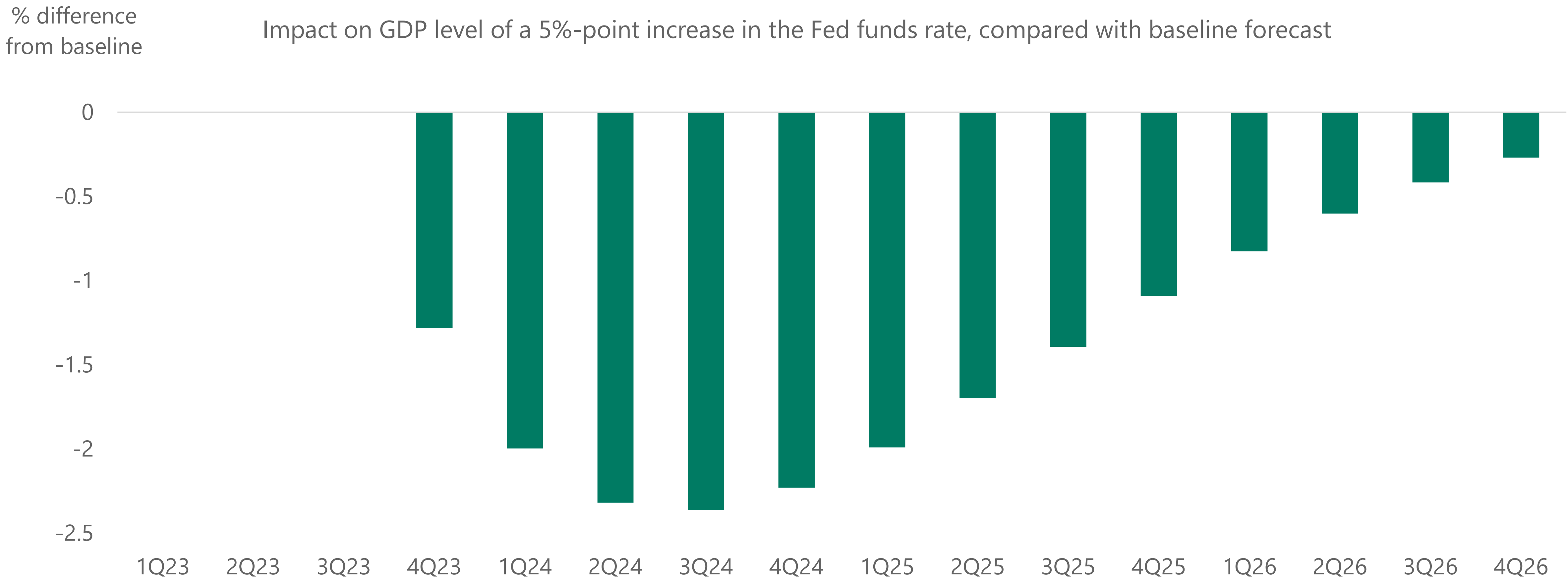
Source: Bloomberg, Apollo Chief Economist.

Consensus was forecasting a recession from October 2022 to July 2023



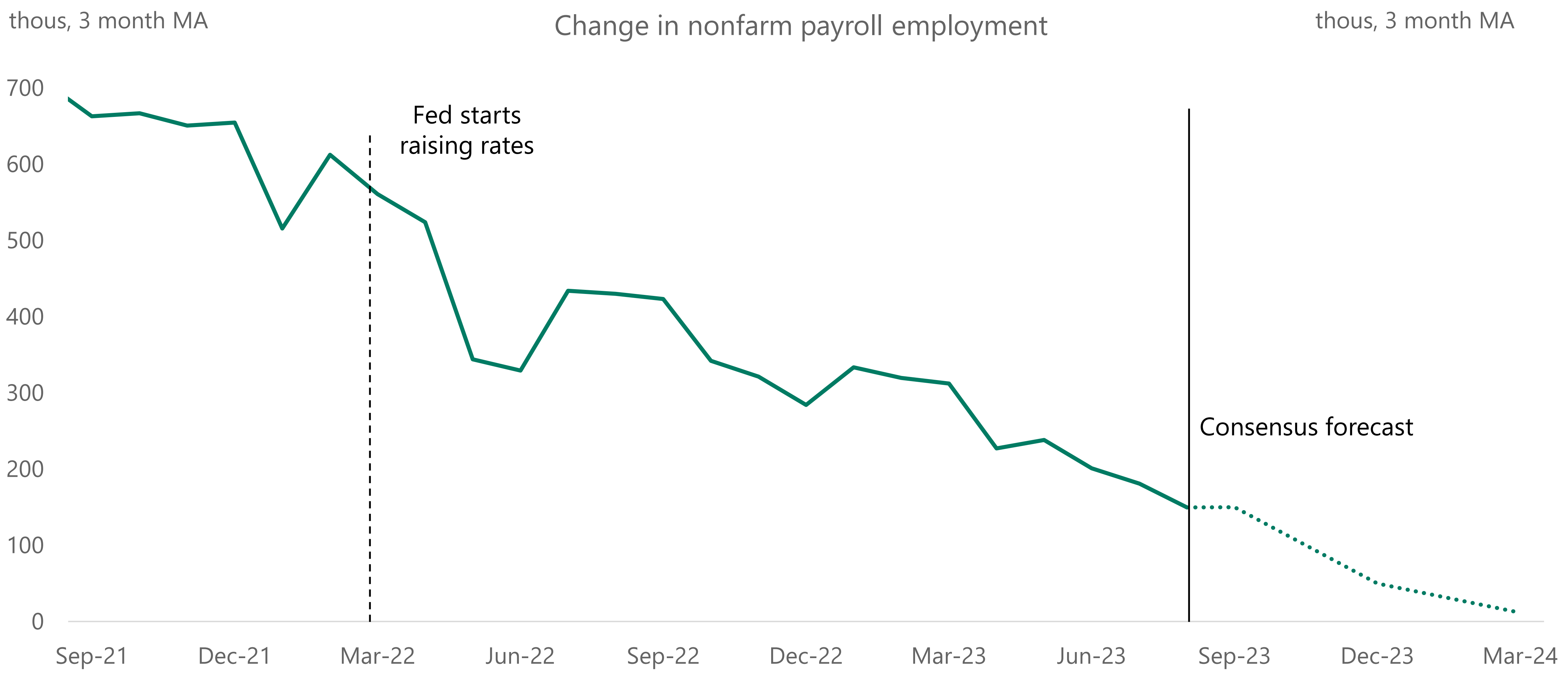
Source: Bloomberg, Apollo Chief Economist

The lagged effects of Fed hikes will continue to drag down growth over the coming 12 months



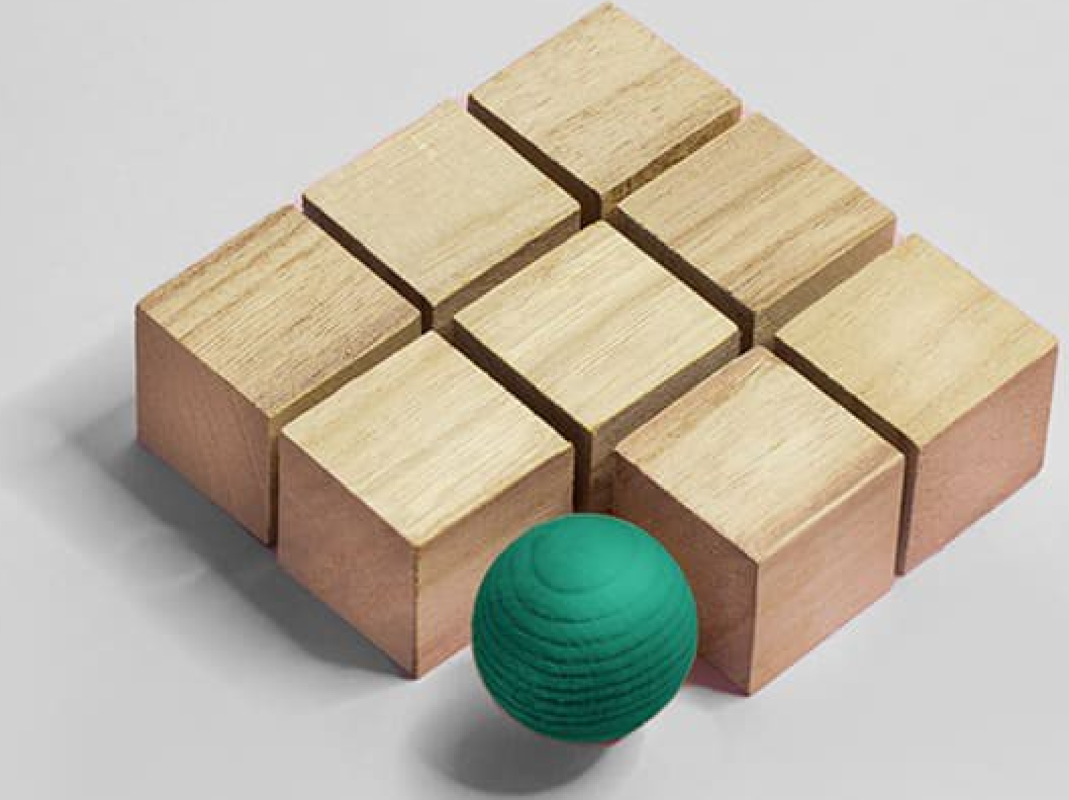
Source: Bloomberg, Apollo Chief Economist. Note: 500bps monetary policy shock in 3Q23

Employment growth keeps slowing

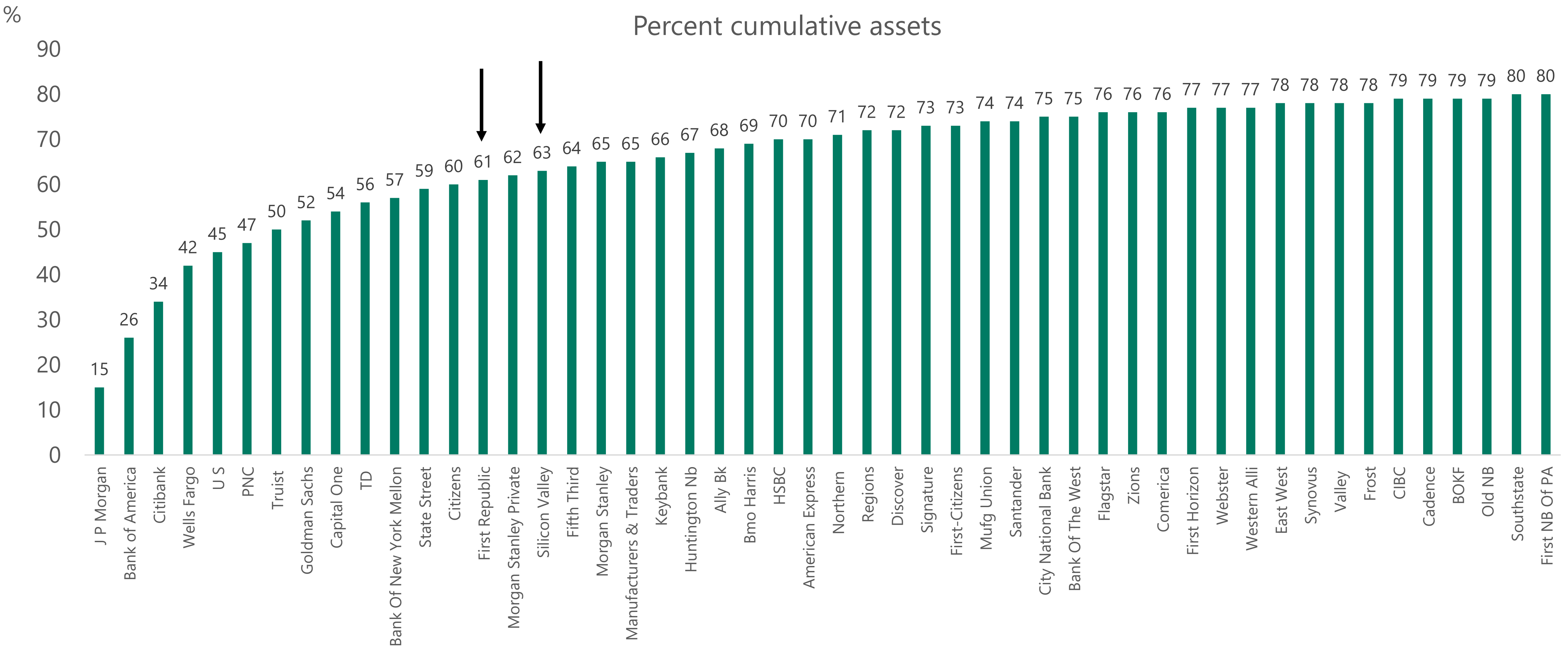


Source: BLS, Haver Analytics, Apollo Chief Economist

The impact of Fed hiking

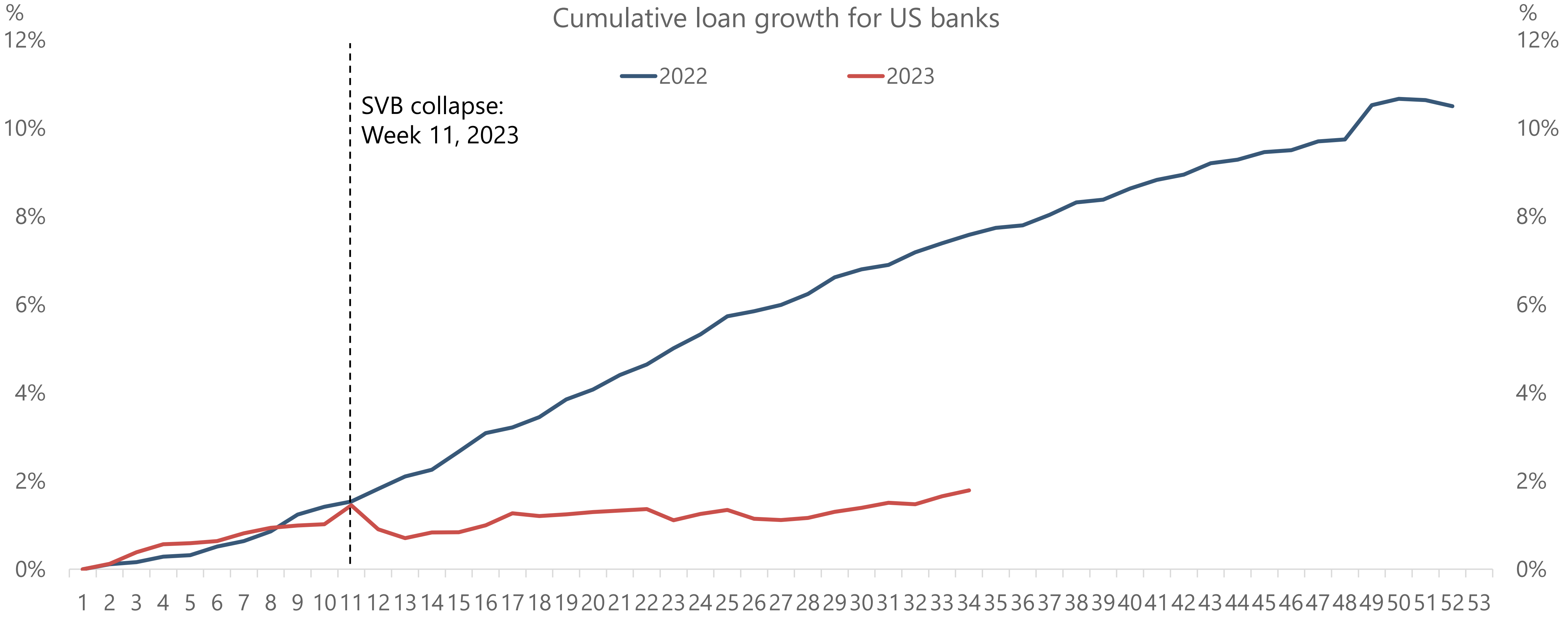


Tighter credit conditions are coming:
Banks "to the right" of SVB are likely to immediately start reorganizing their balance sheets



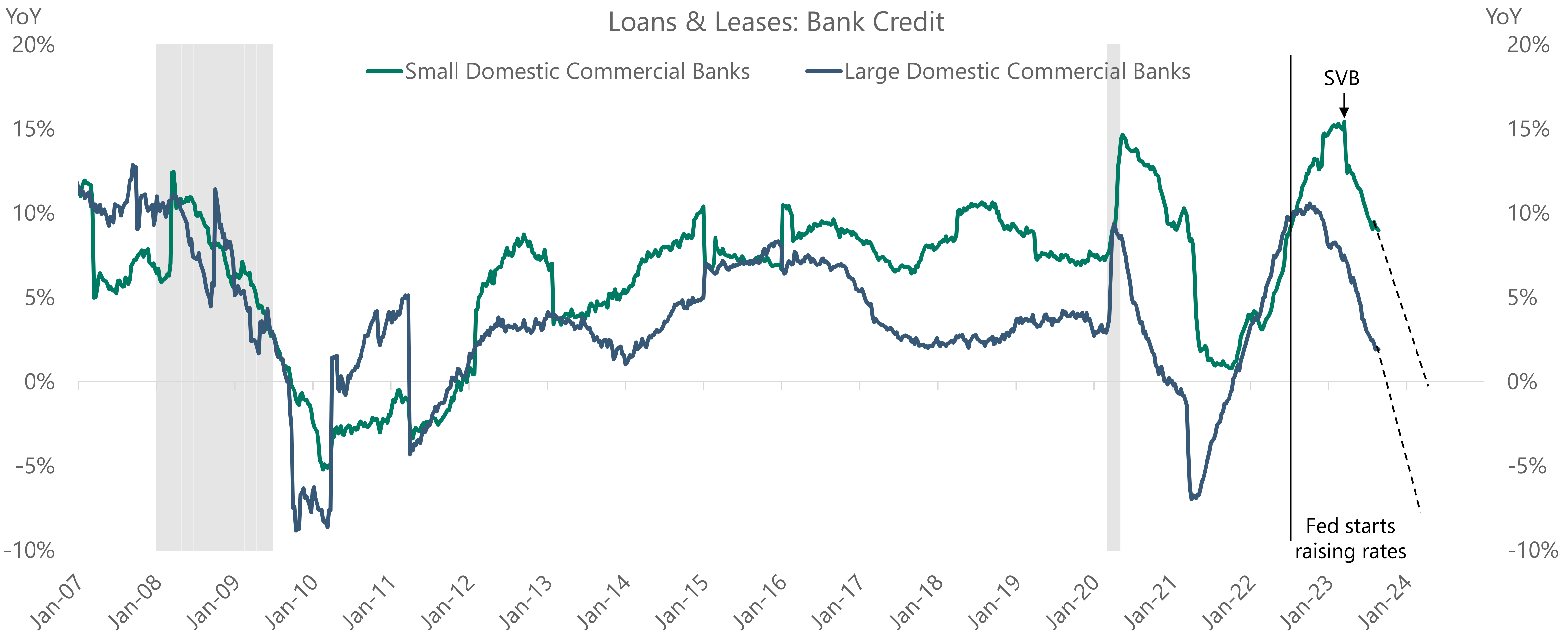
Source: Federal Reserve Board, Haver Analytics, Apollo Chief Economist. As of 2022Q4. Represents the views and opinions of Apollo's Chief Economist. Subject to change at any time without notice.

SVB having a permanent effect



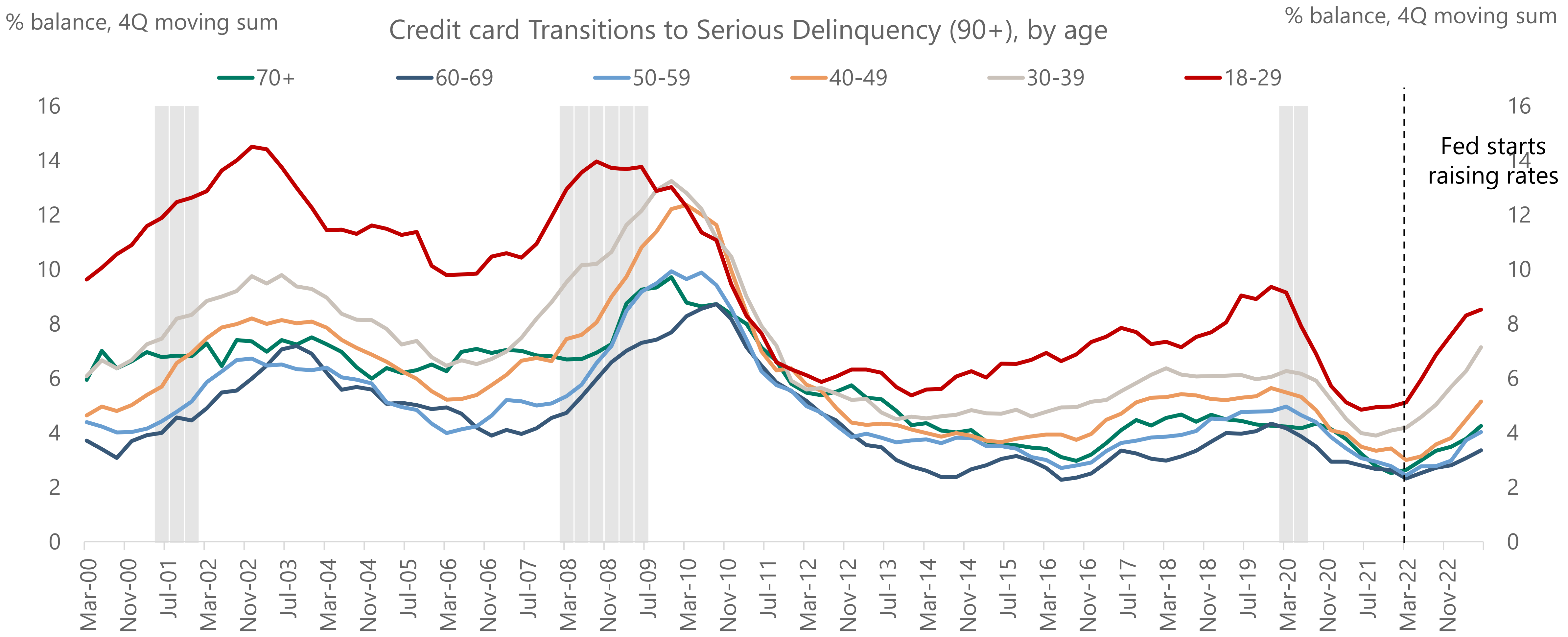
Source: FRB, Bloomberg, Apollo Chief Economist

Weekly Fed data shows small and large bank lending growth slowing rapidly



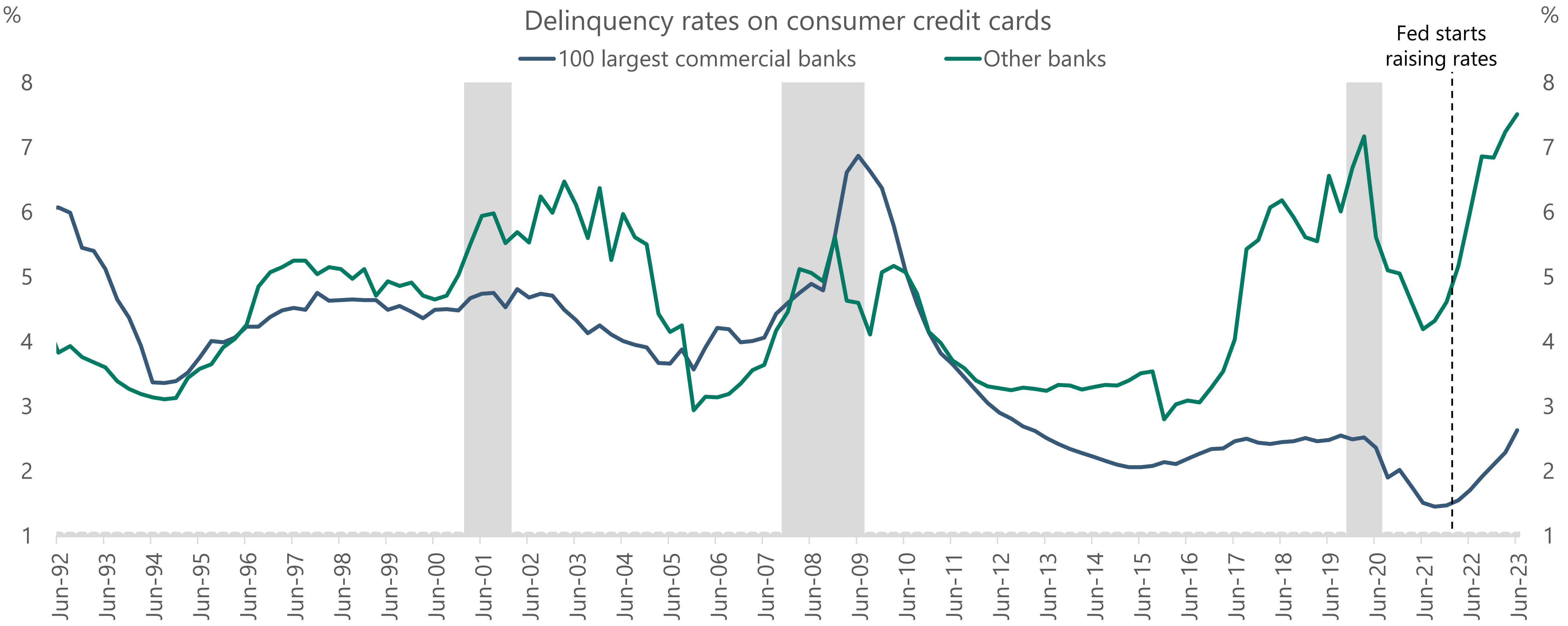
Source: Federal Reserve Board, Haver Analytics, Apollo Chief Economist.

Credit card delinquency rates rising



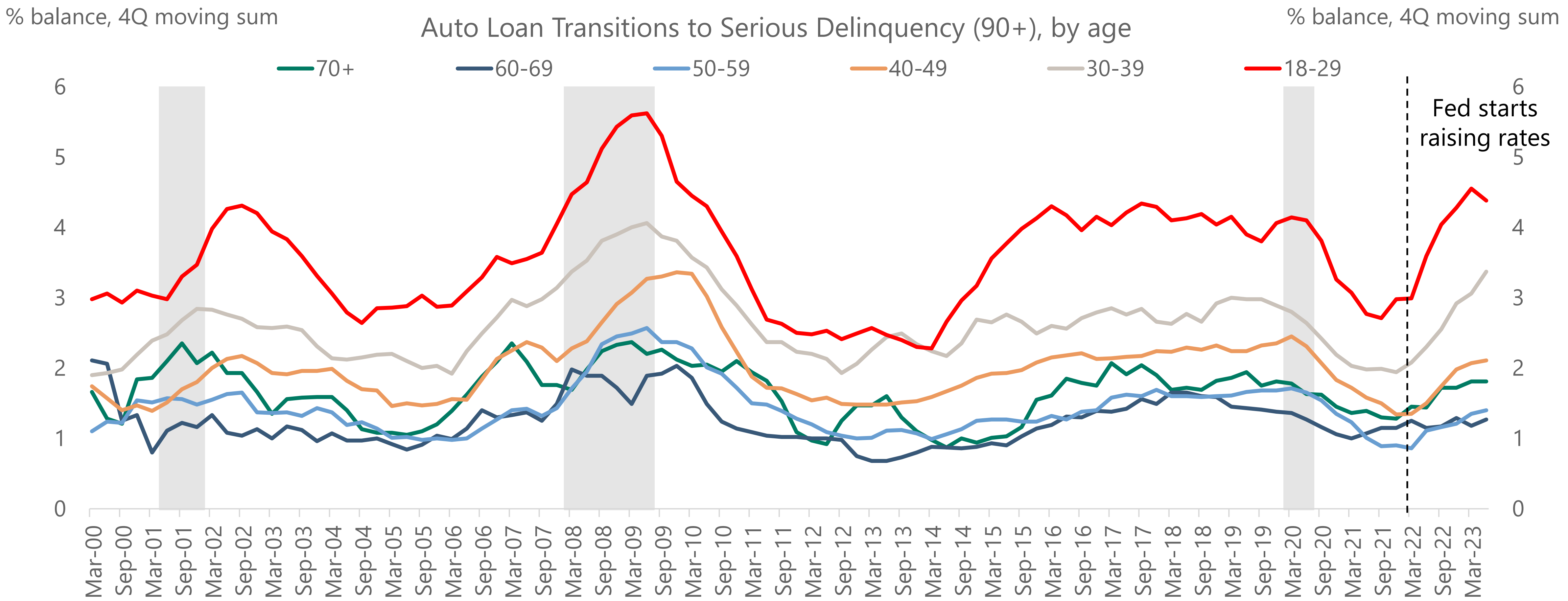
Source: New York Fed Consumer Credit Panel / Equifax, Apollo Chief Economist

Credit card delinquency rates much higher for small banks



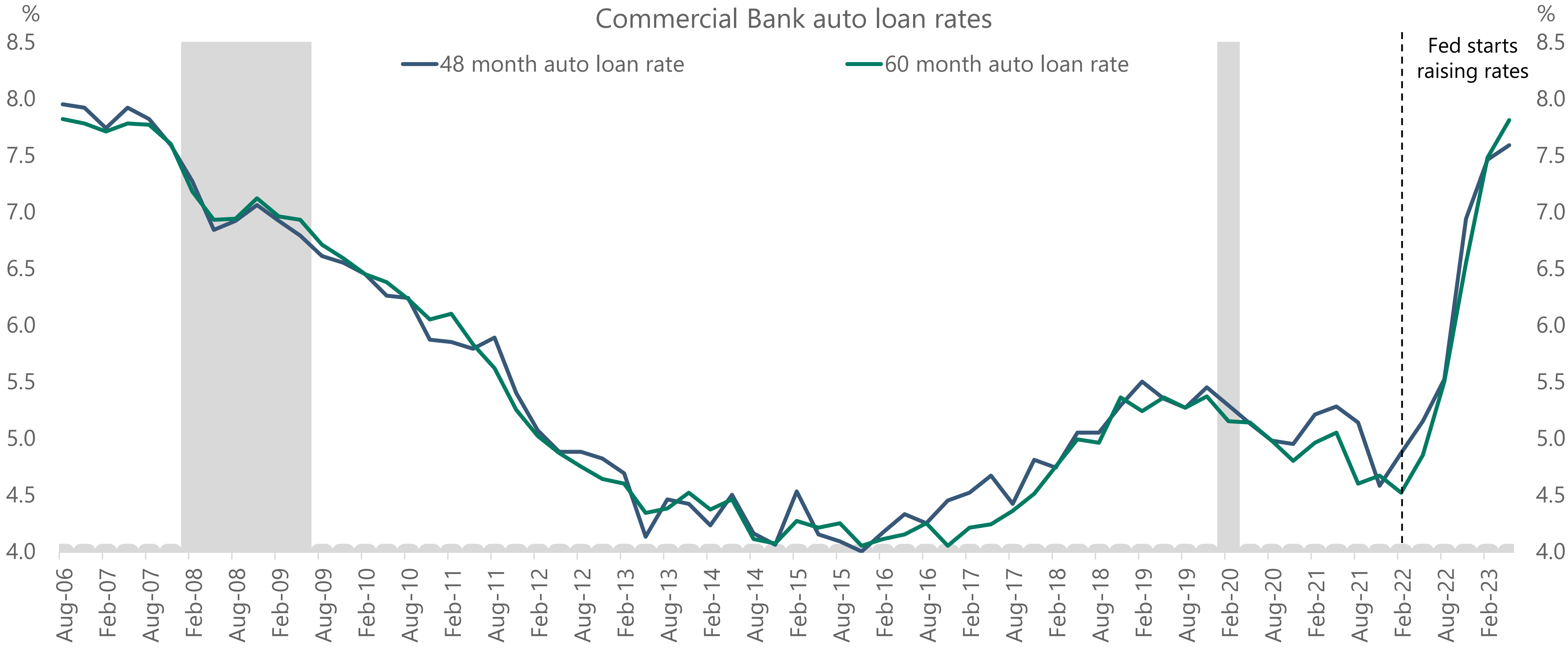
Source: FRB, Bloomberg, Apollo Chief Economist

Auto loan transitions to serious delinquency approaching 2008 levels



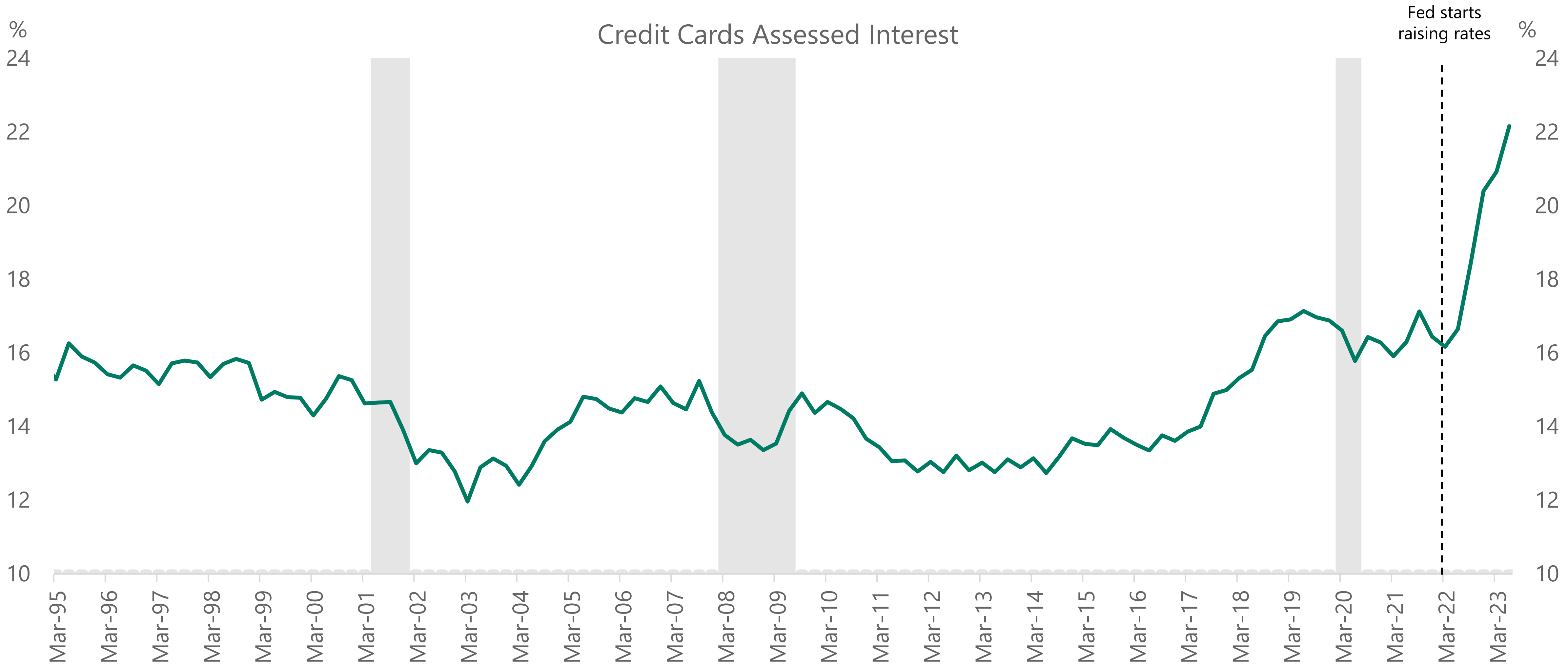
Source: FRBNY Consumer Credit Panel, Equifax, Haver Analytics, Apollo Chief Economist

Interest rate on auto loans



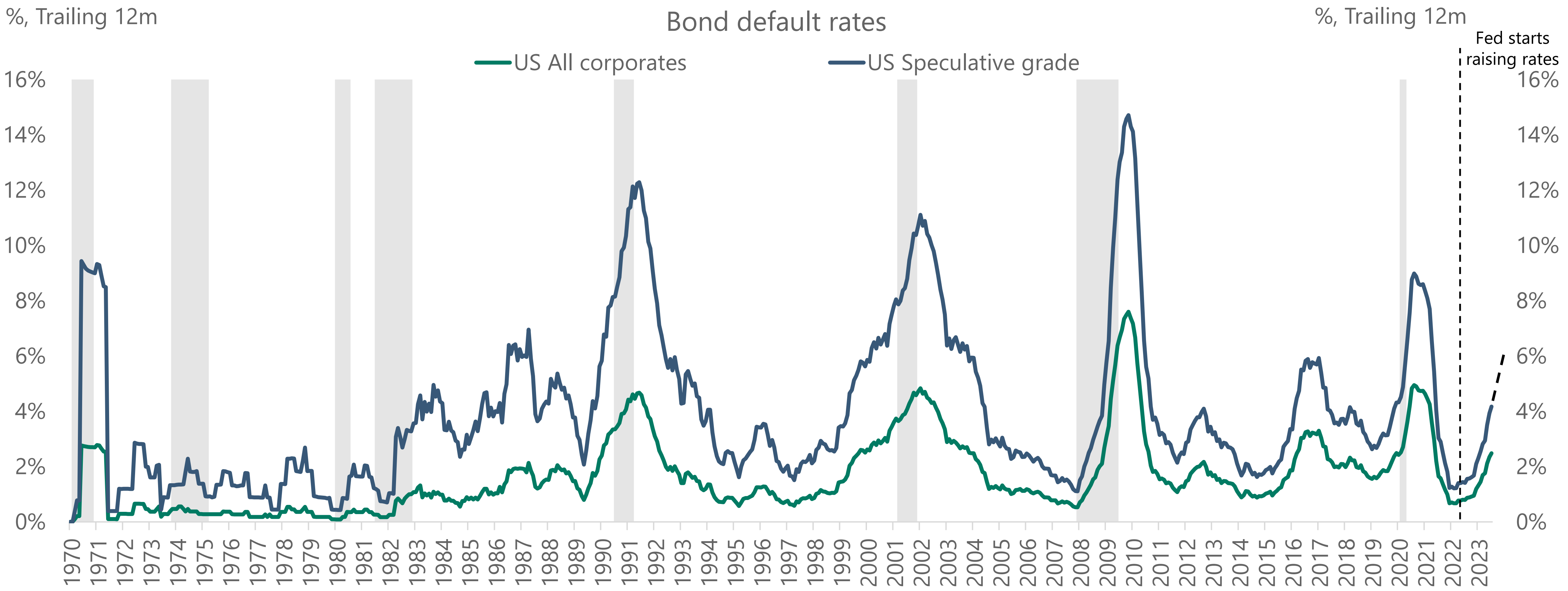
Source: FRB, Bloomberg, Apollo Chief Economist

Interest rate on credit cards



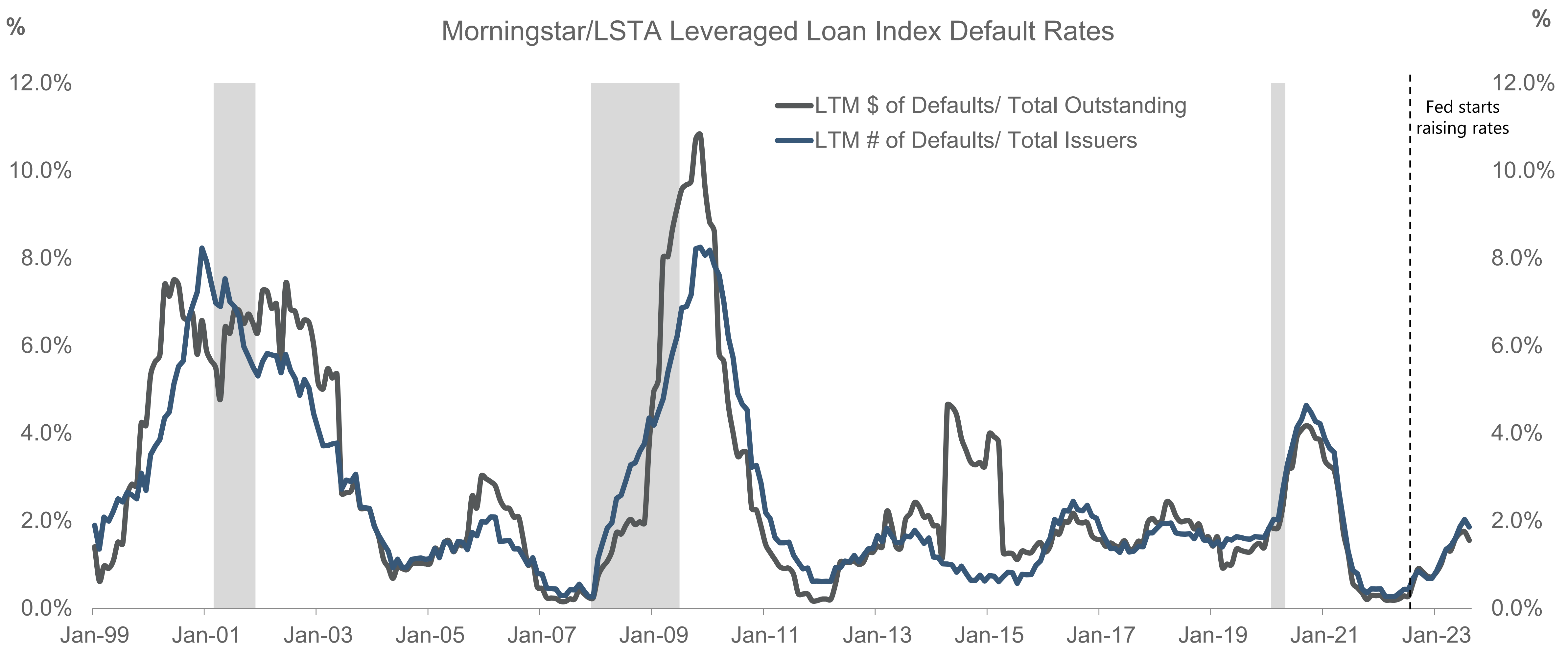
Source: FRB, Haver Analytics, Apollo Chief Economist

A default cycle has started, and markets are not paying attention



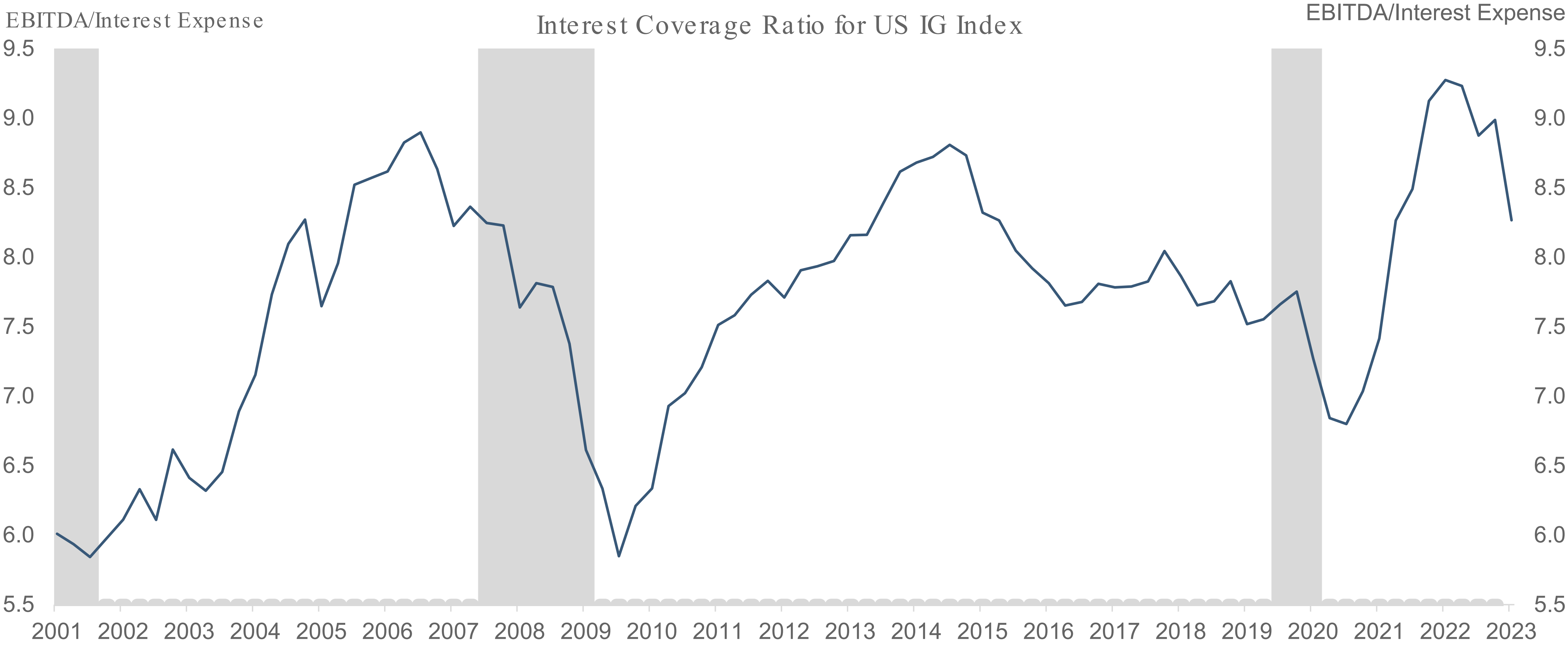
Source: Moody's Analytics, Apollo Chief Economist

Leveraged loan index default rates starting to rise



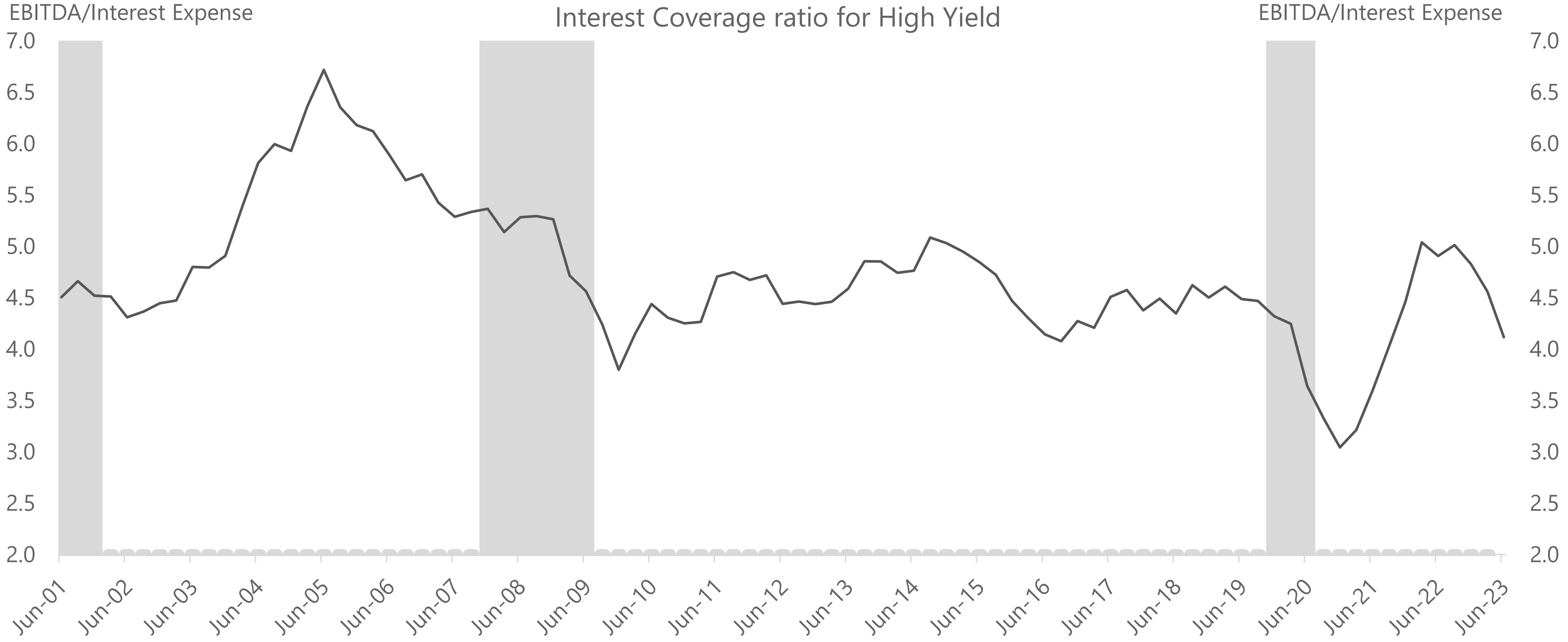
Source: Pitchbook LCD, Apollo Chief Economist

IG ICR declining



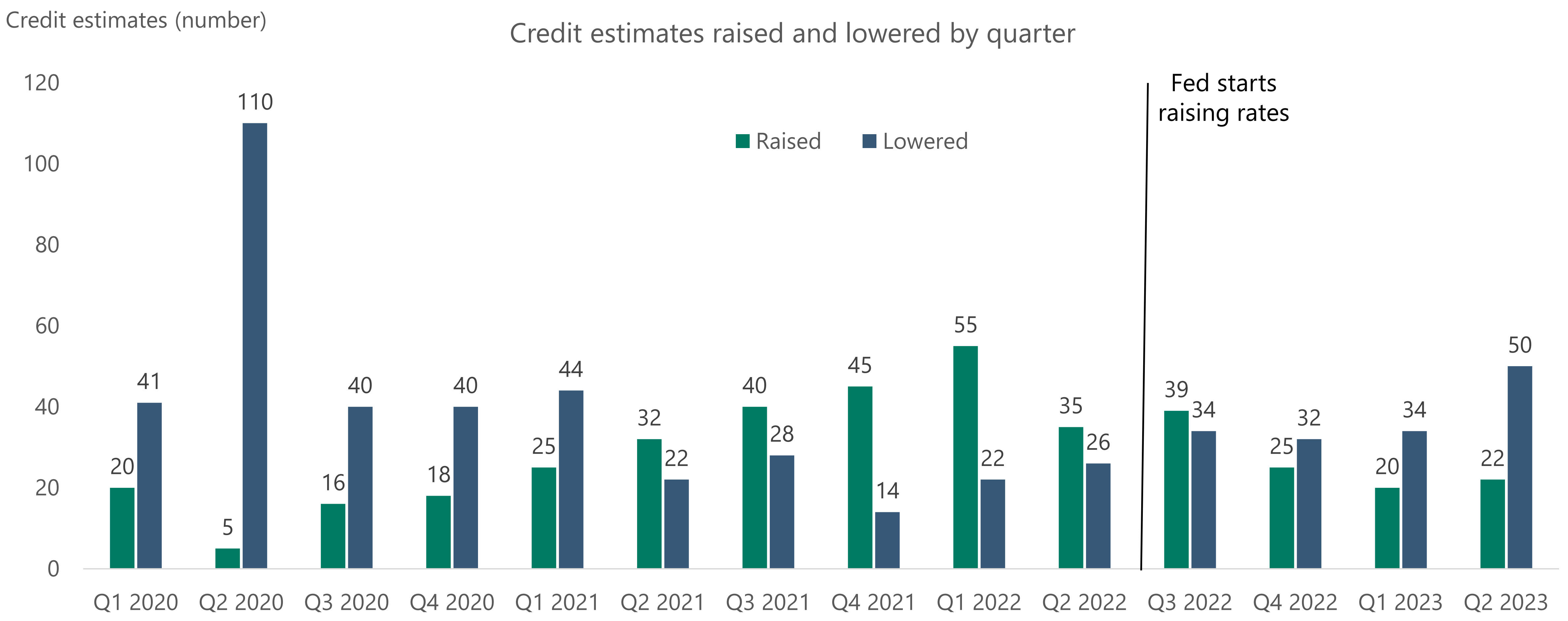
Source: Bloomberg, Apollo Chief Economist

HY ICR declining



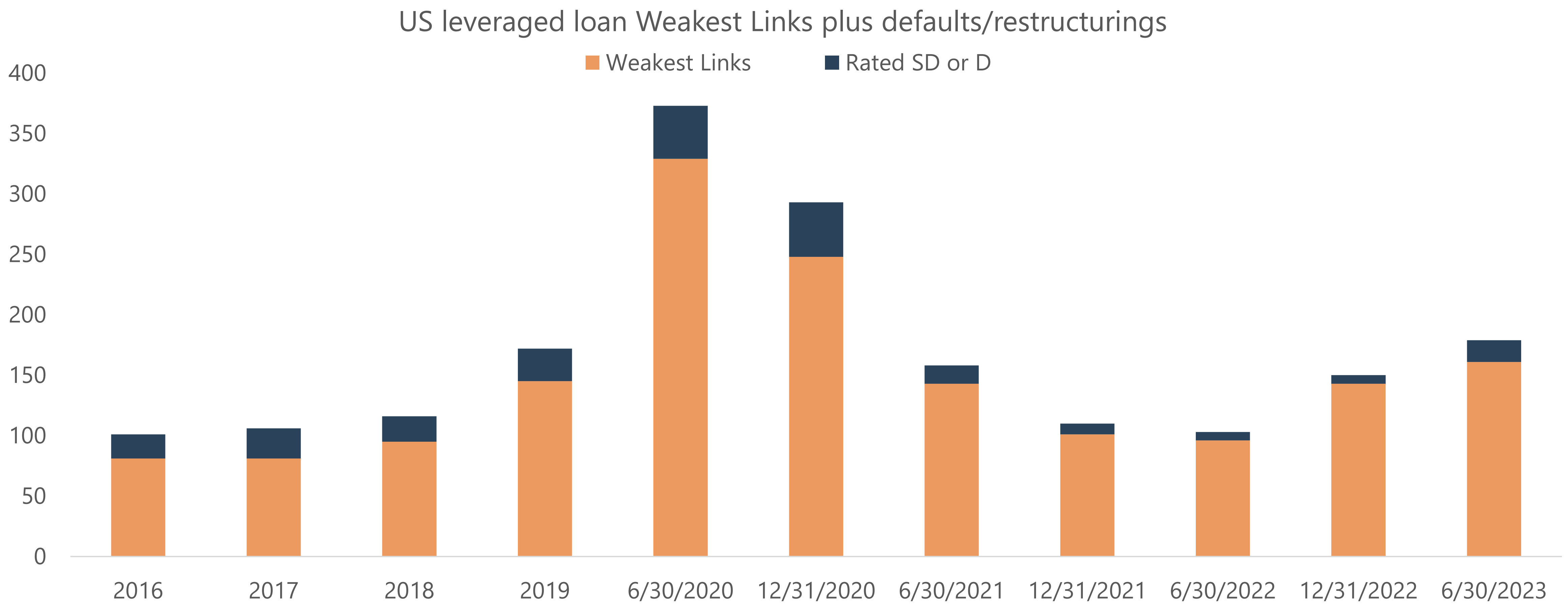
Source: Bloomberg, Apollo Chief Economist

Since the Fed started raising rates the number of downgrades have outnumbered the number of upgrades



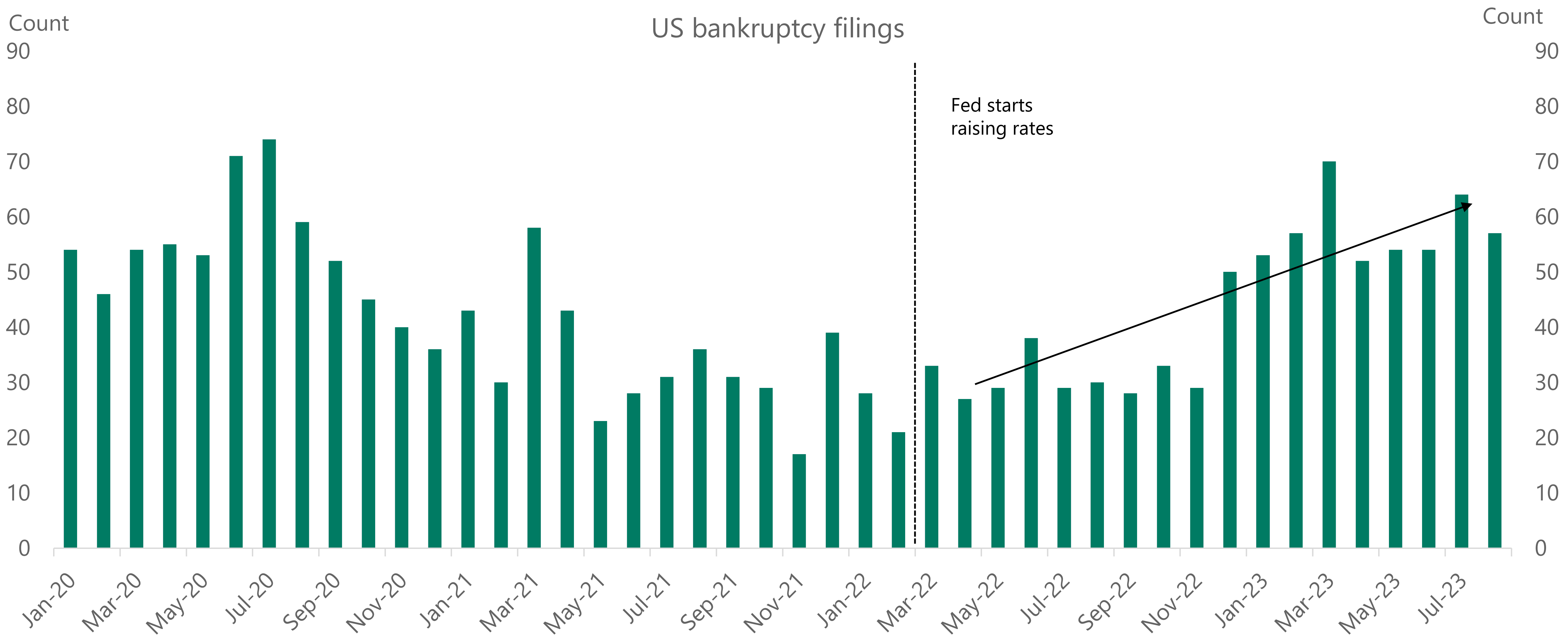
Source: S&P Global ratings, Apollo Chief Economist

Fed hikes pushing up the number of leveraged loan Weakest Links



Source: Pitchbook, LCD; Morningstar LSTA US Leveraged Loan Index, Apollo Chief Economist (Data through June 30, 2023) (SD and D - An obligor rated 'SD' (Selective Default) or 'D' has failed to pay one or more of its financial obligations (rated or unrated) when it came due. A 'D' rating is assigned when Standard & Poor's believes that the default will be a general default and that the obligor will fail to pay all or substantially all of its obligations as they come due. An 'SD' rating is assigned when Standard & Poor's believes that the obligor has selectively defaulted on a specific issue or class of obligations, but it will continue to meet its payment obligations on other issues or classes of obligations in a timely manner.)

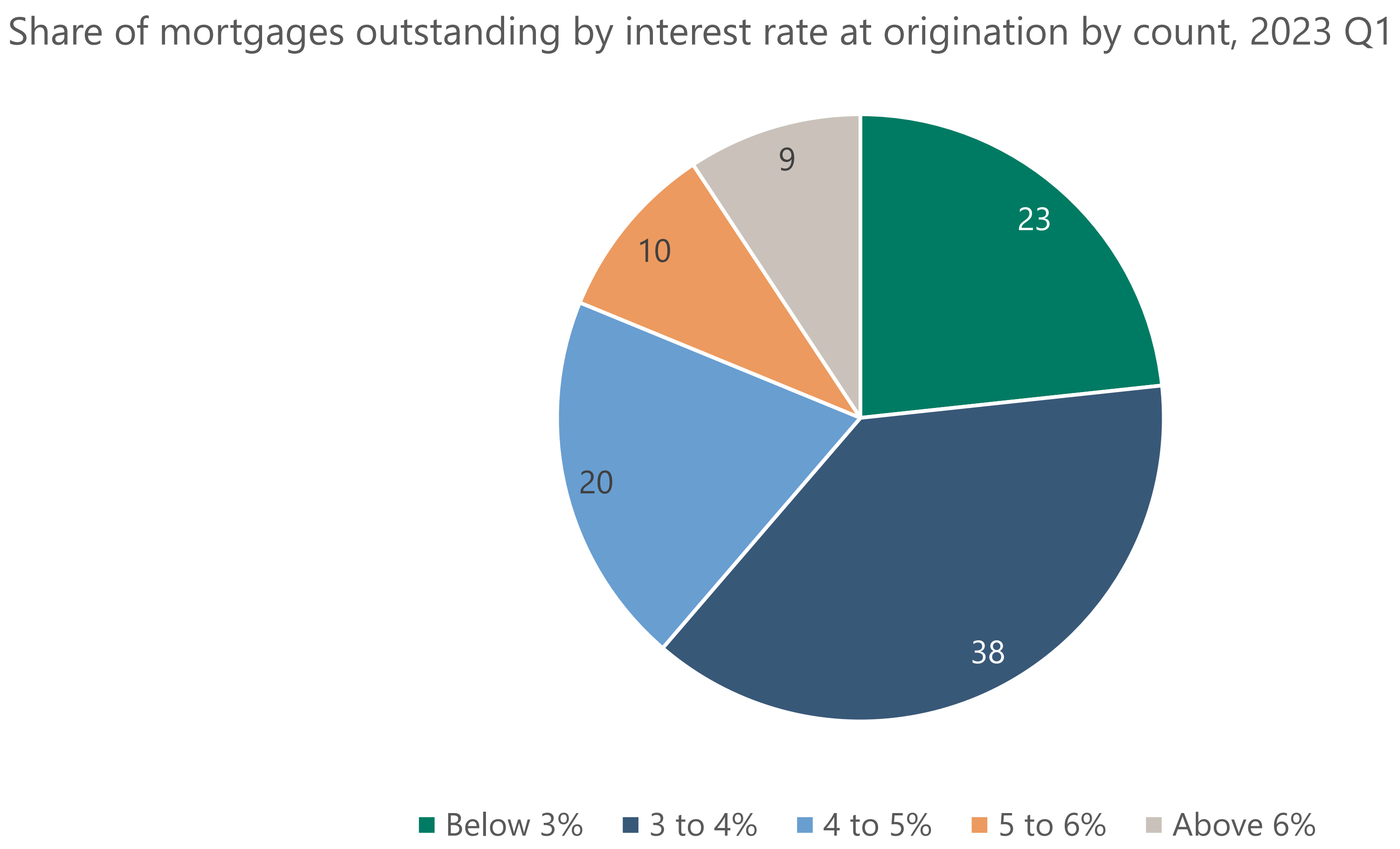
The negative effects of higher costs of capital continue



Source: S&P Capital IQ, Bloomberg, Apollo Chief Economist. Note: Bankruptcy figures include public companies or private companies with public debt with a minimum of $2 million in assets or liabilities at the time of filing, in addition to private companies with at least $10 million in assets or liabilities.

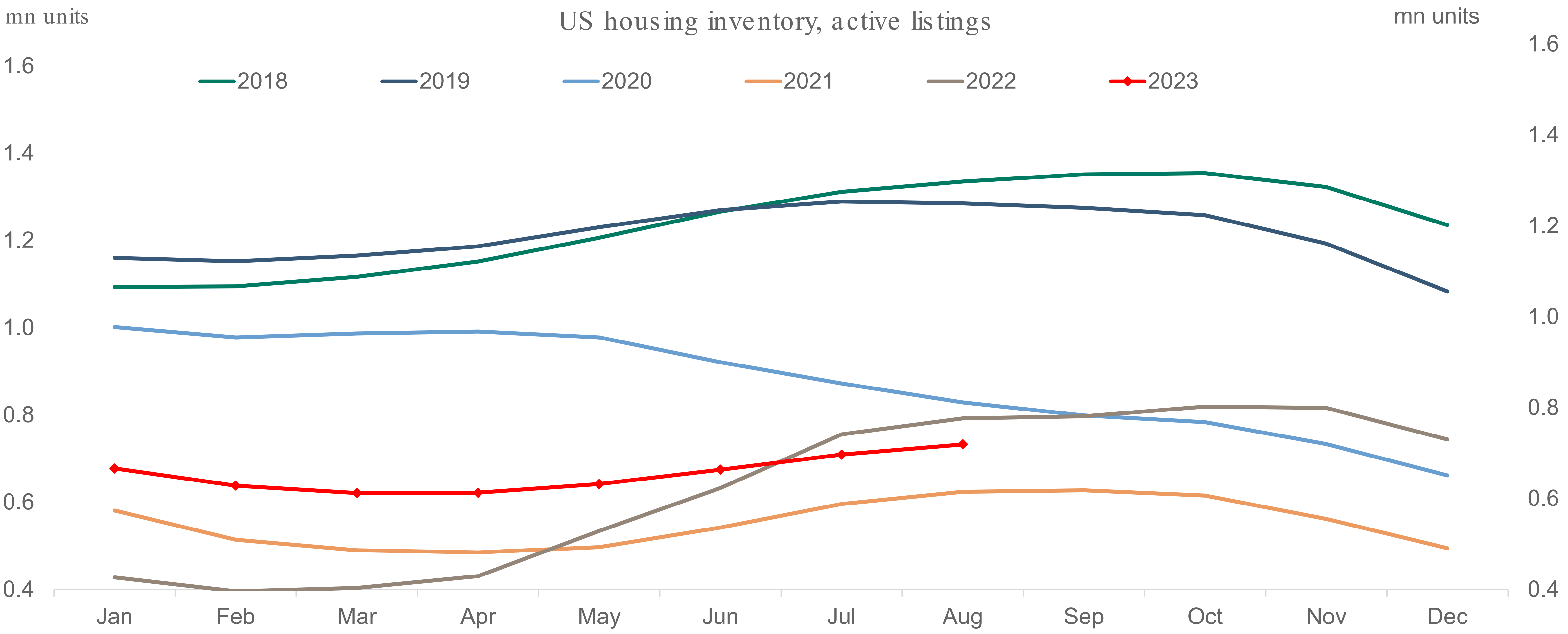
Outlook for the economy

Share of mortgages outstanding by interest rate



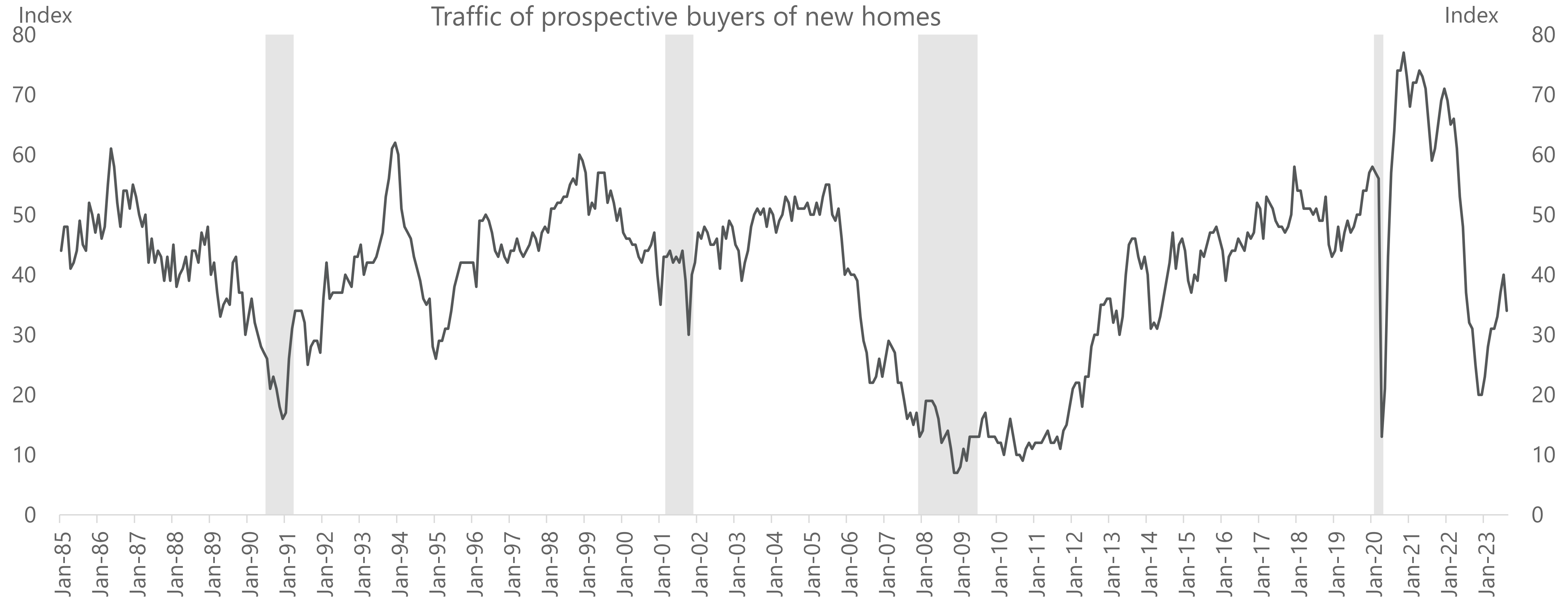
Source: FHFA, Apollo Chief Economist

Active listings at very low levels, very low inventory of homes for sale



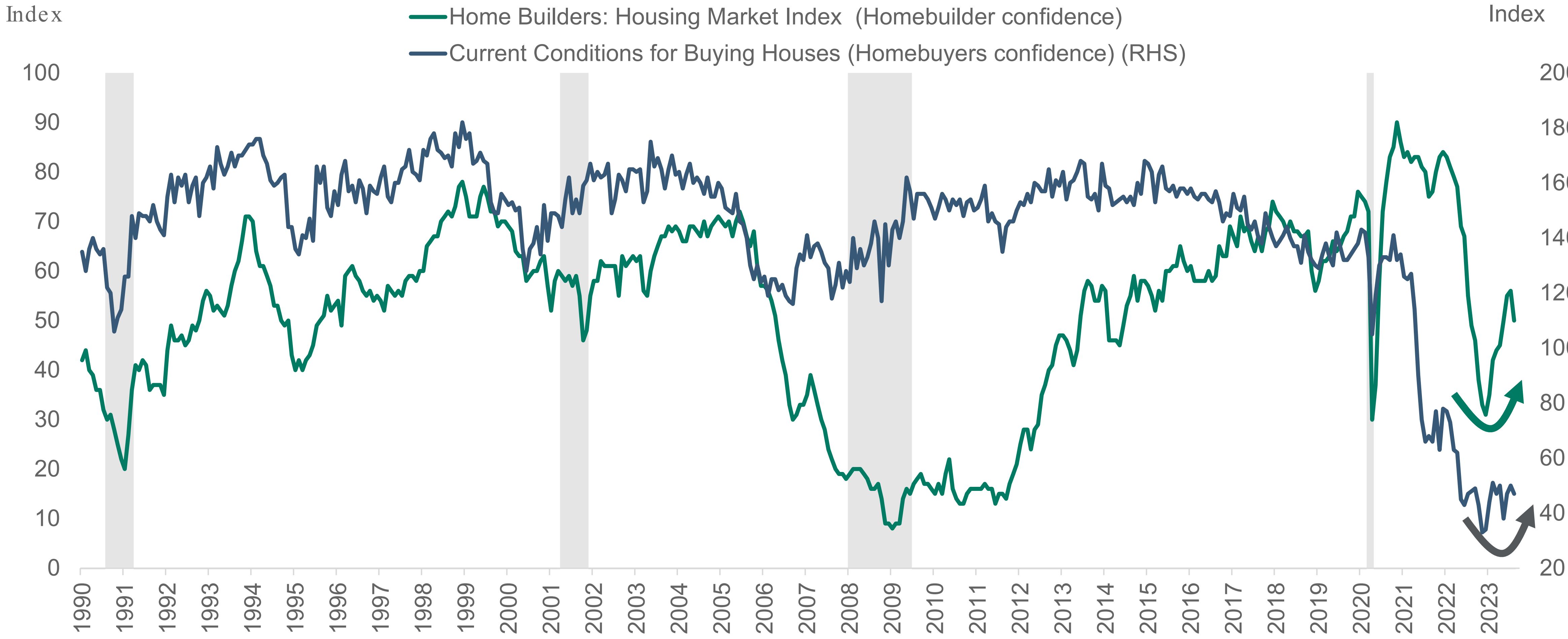
Source: Realtor.com, Apollo Chief Economist

Traffic of prospective homebuyers starting to improve



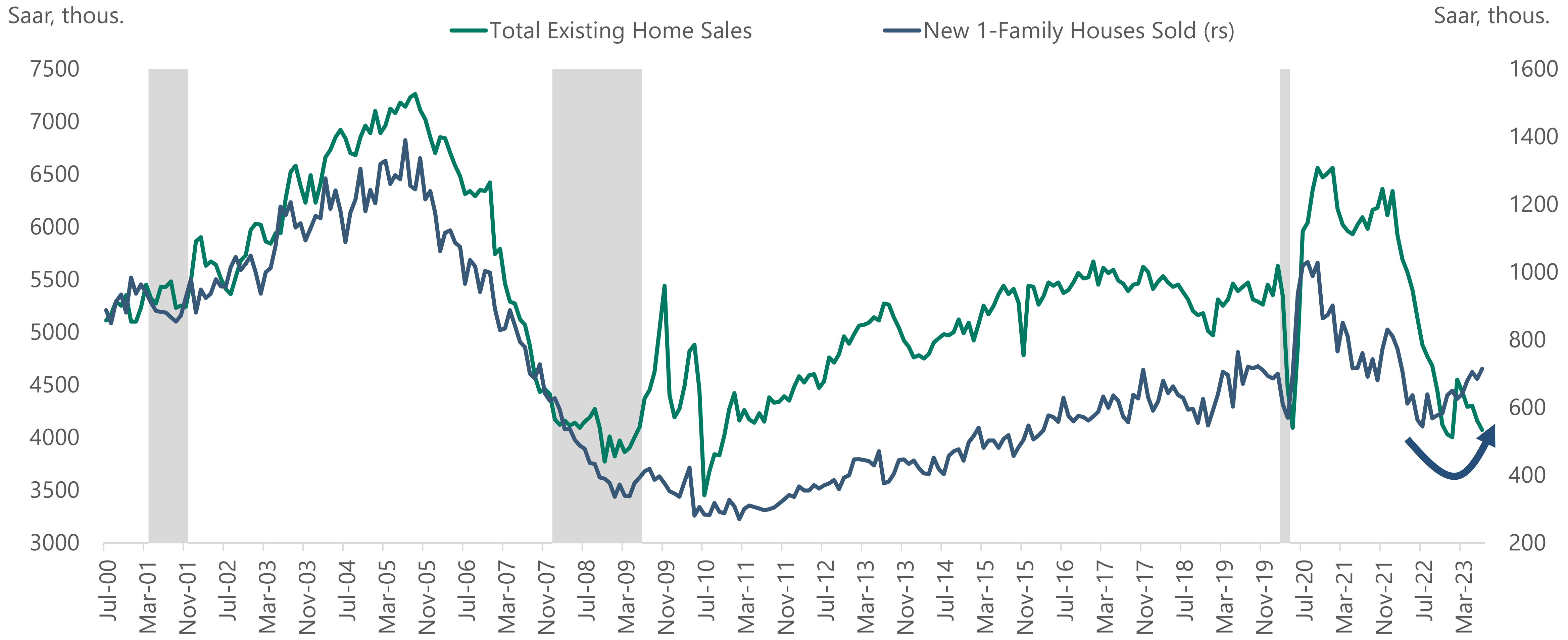
Source: National Association of Homebuilders, Bloomberg, Apollo Chief Economist

Confidence improving for homebuyers and homebuilders



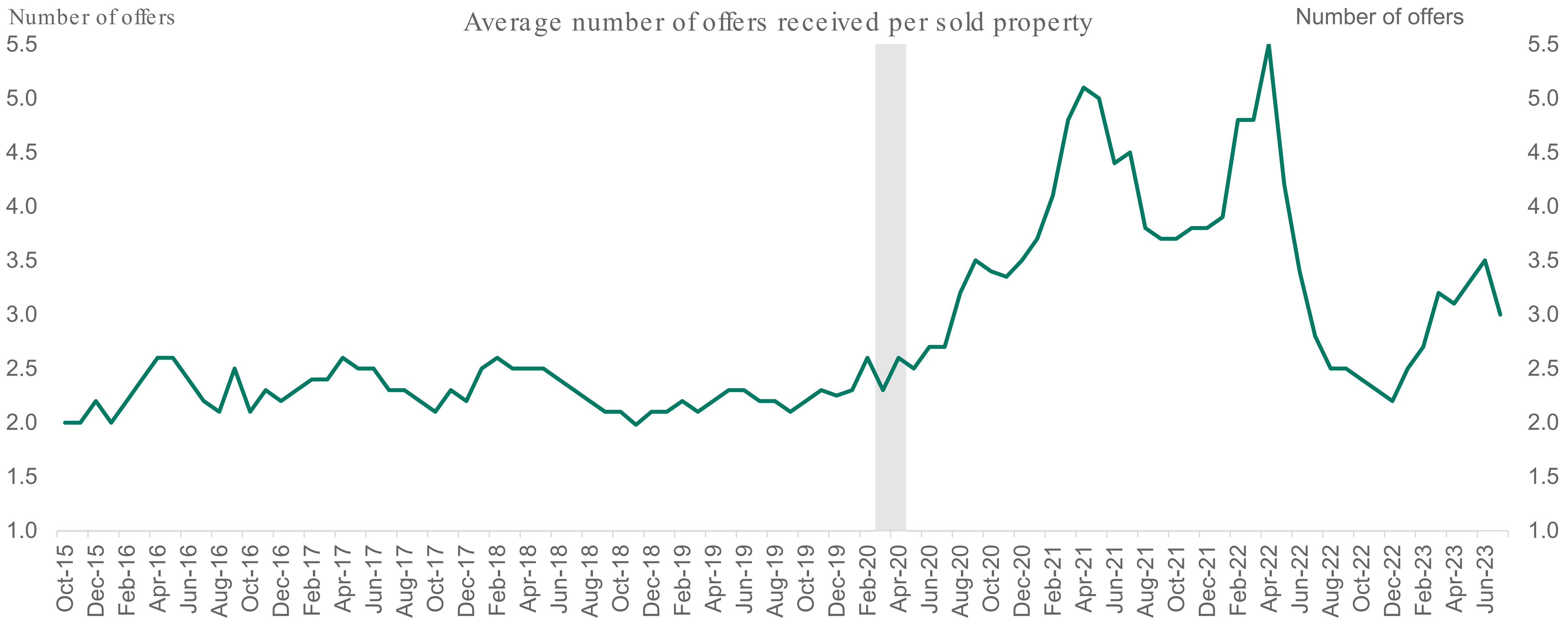
Source: University of Michigan, NAHB, Haver Analytics, Apollo Chief Economist

Home sales starting to recover



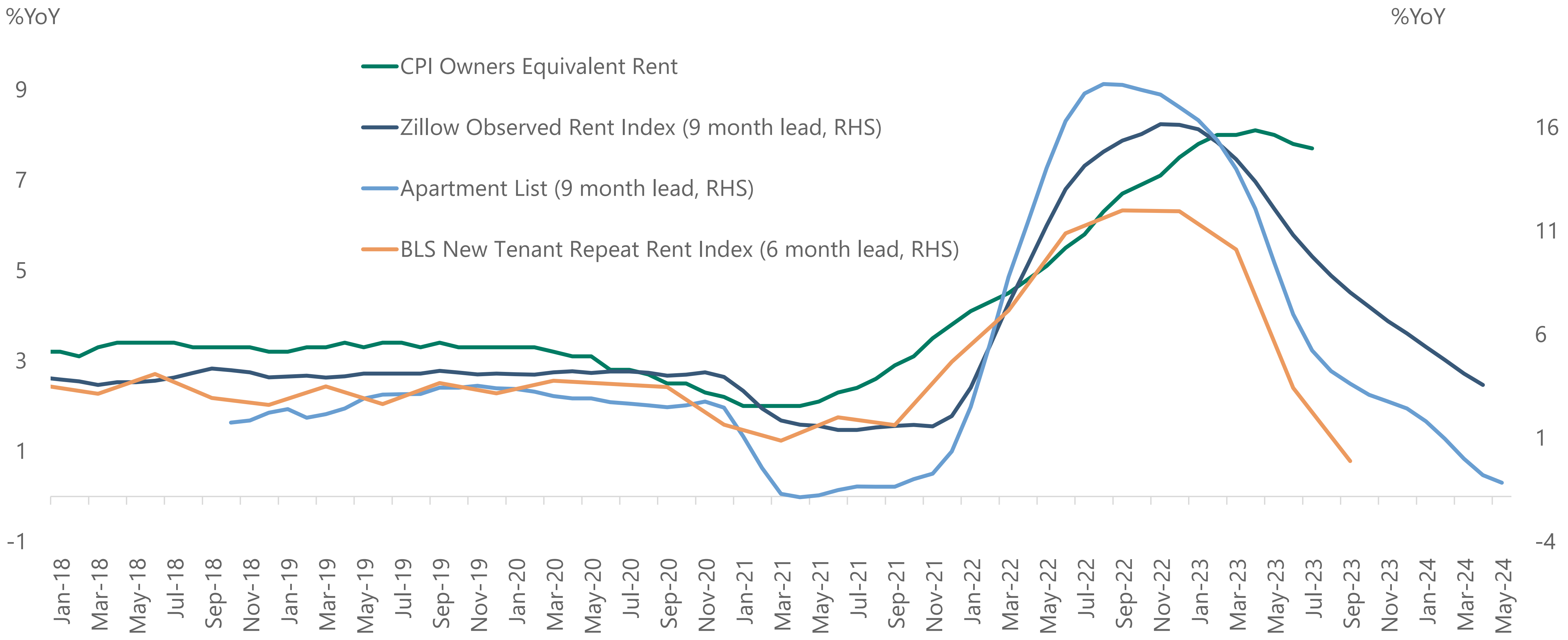
Source: Census Bureau, NAR, Haver, Apollo Chief Economist; Forecast is Bloomberg consensus

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



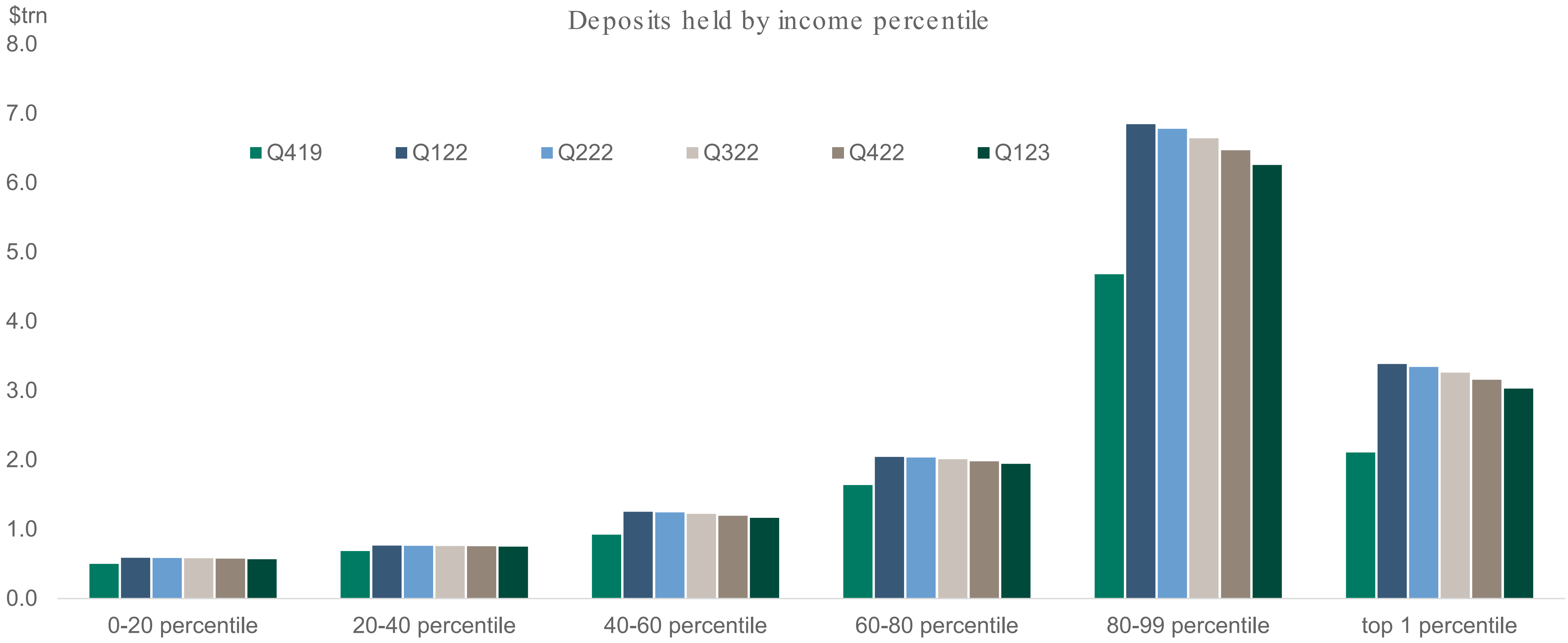
Source: NAR, Apollo Chief Economist

Will housing inflation come down now that housing is rebounding?



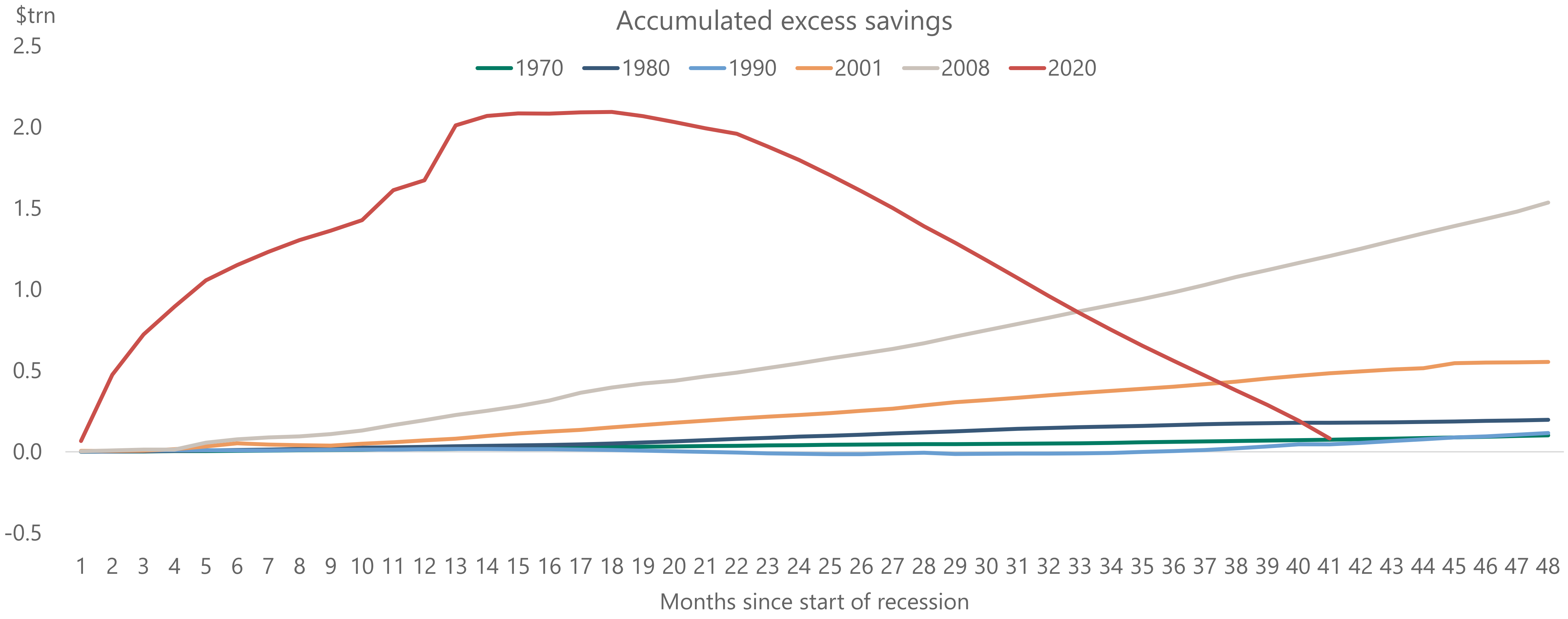
Source: BLS, Apartment List, Zillow, Haver Analytics, Apollo Chief Economist

Household savings across different income groups



Source: FRB, Haver Analytics, Apollo Chief Economist

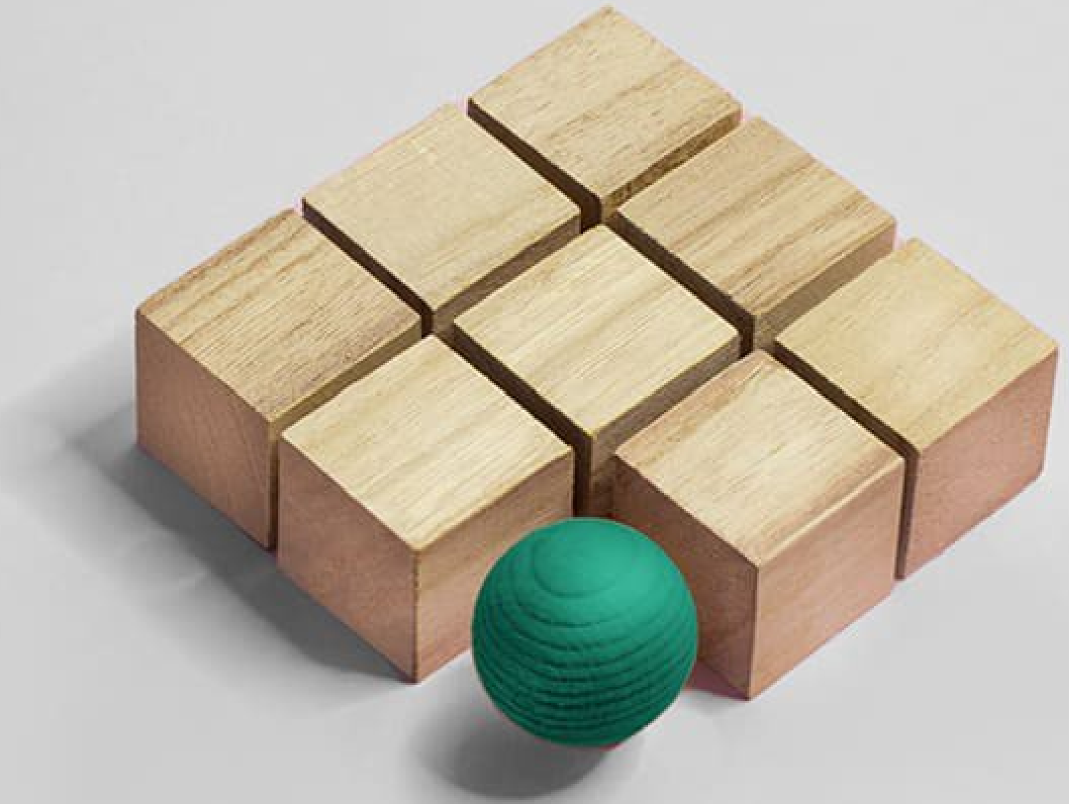
US households running out of excess savings



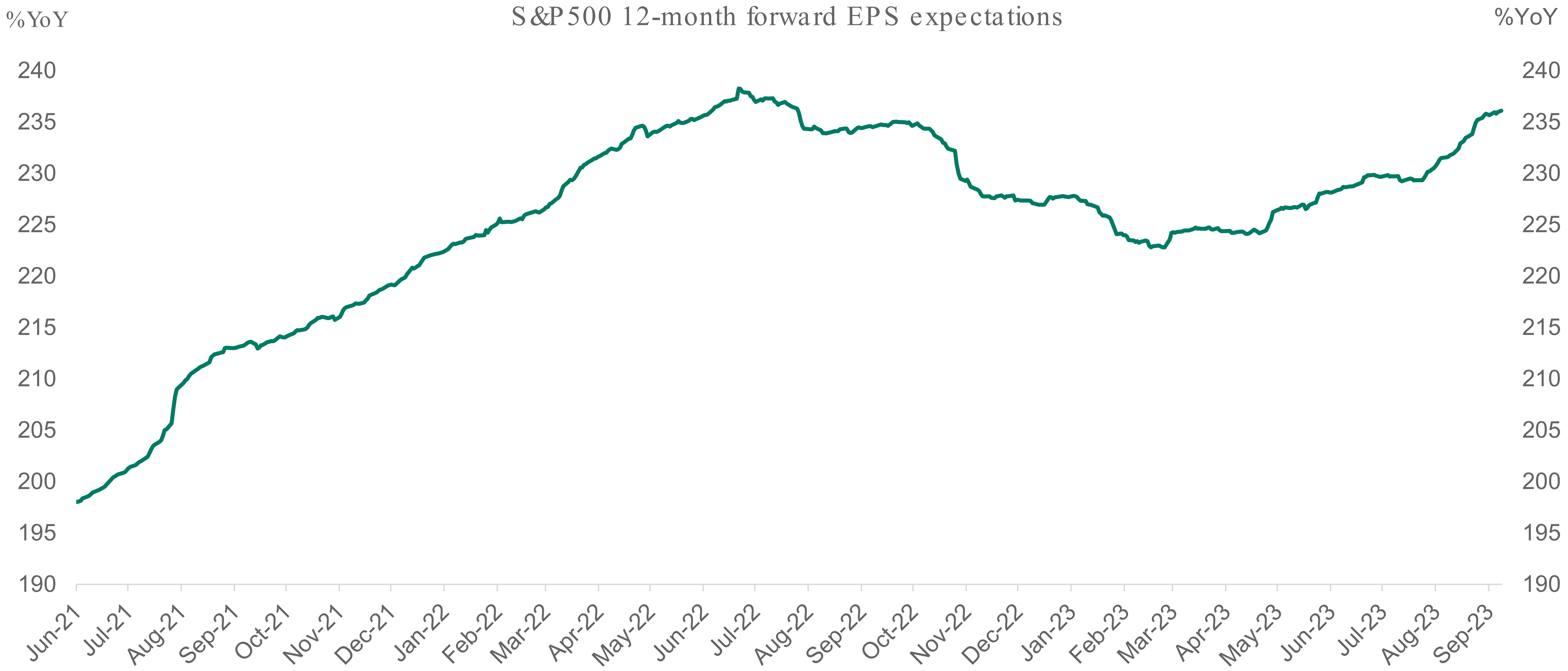
Source: BEA, Haver Analytics, Apollo Chief Economist.

Note: Excess savings are calculated as the accumulated difference between actual personal savings and the trend implied by data for the 48 months leading up to the first month of each recession, as defined by the NBER.

Outlook for financial markets

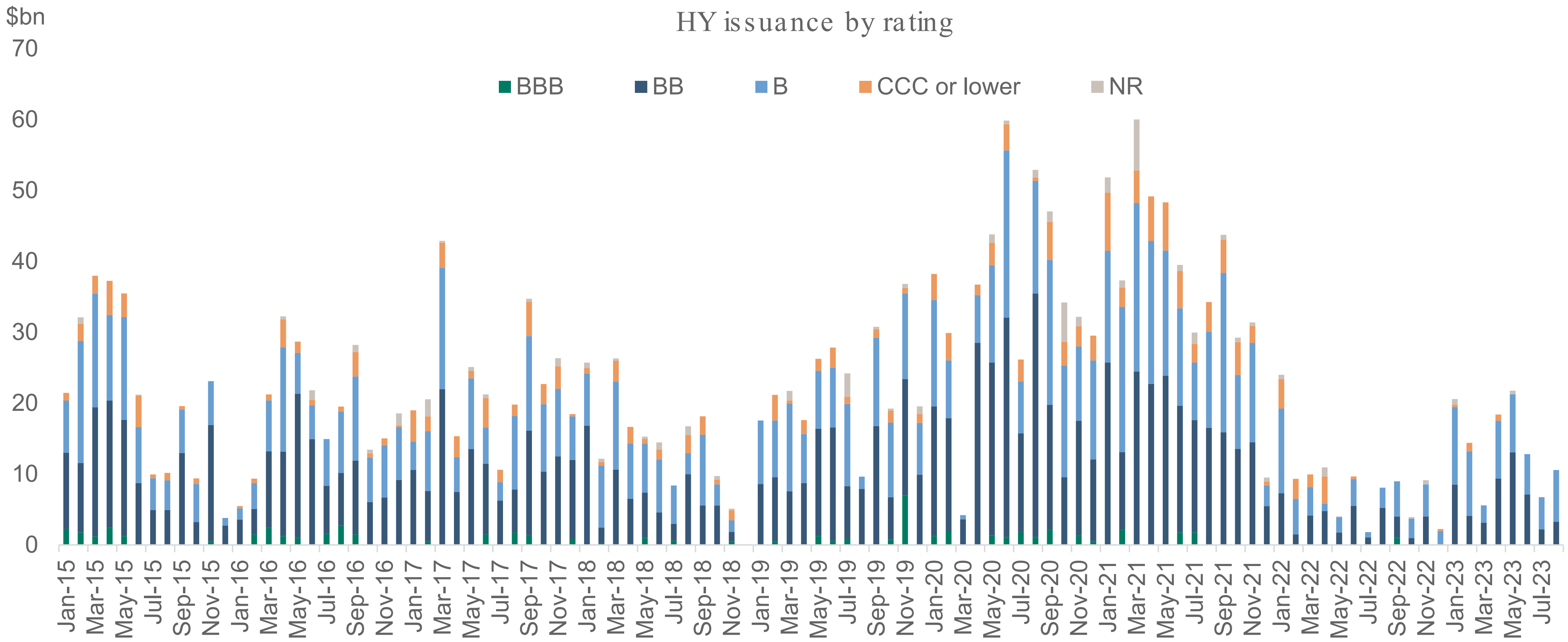


S&P500 earnings expectations moving higher



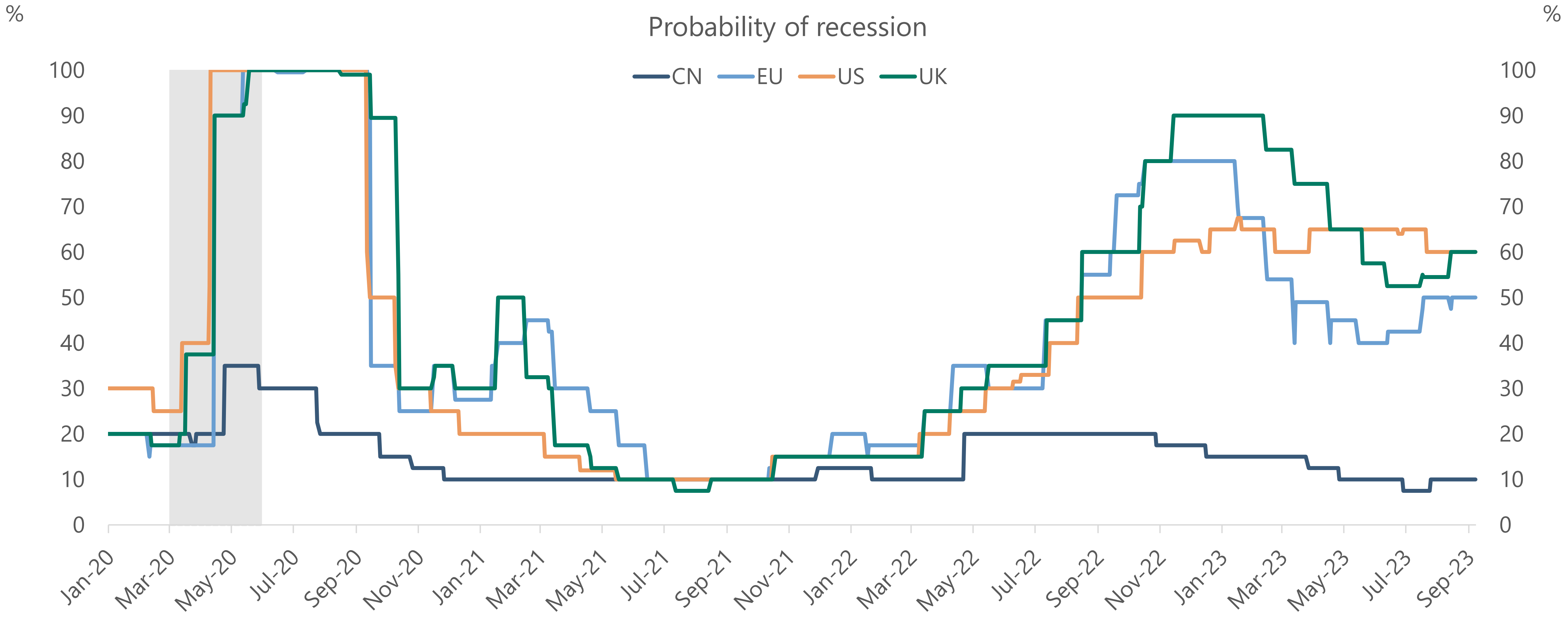
Source: Bloomberg, Apollo Chief Economist

HY issuance by rating



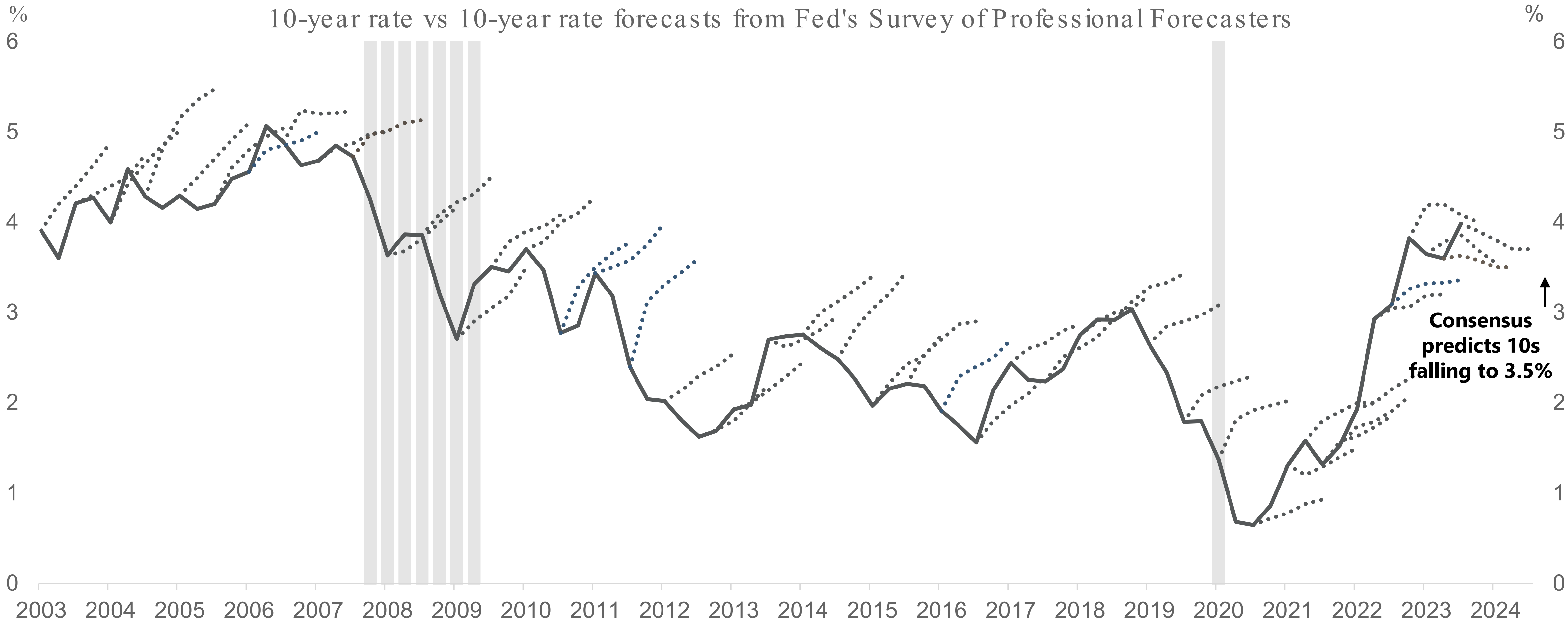
Source: S&P LCD, Apollo Chief Economist.

Consensus has lowered recession probability for Europe, UK, and China. But not the US.



Source: Bloomberg, Apollo Chief Economist

For the first time in 20 years, the consensus is forecasting lower long rates



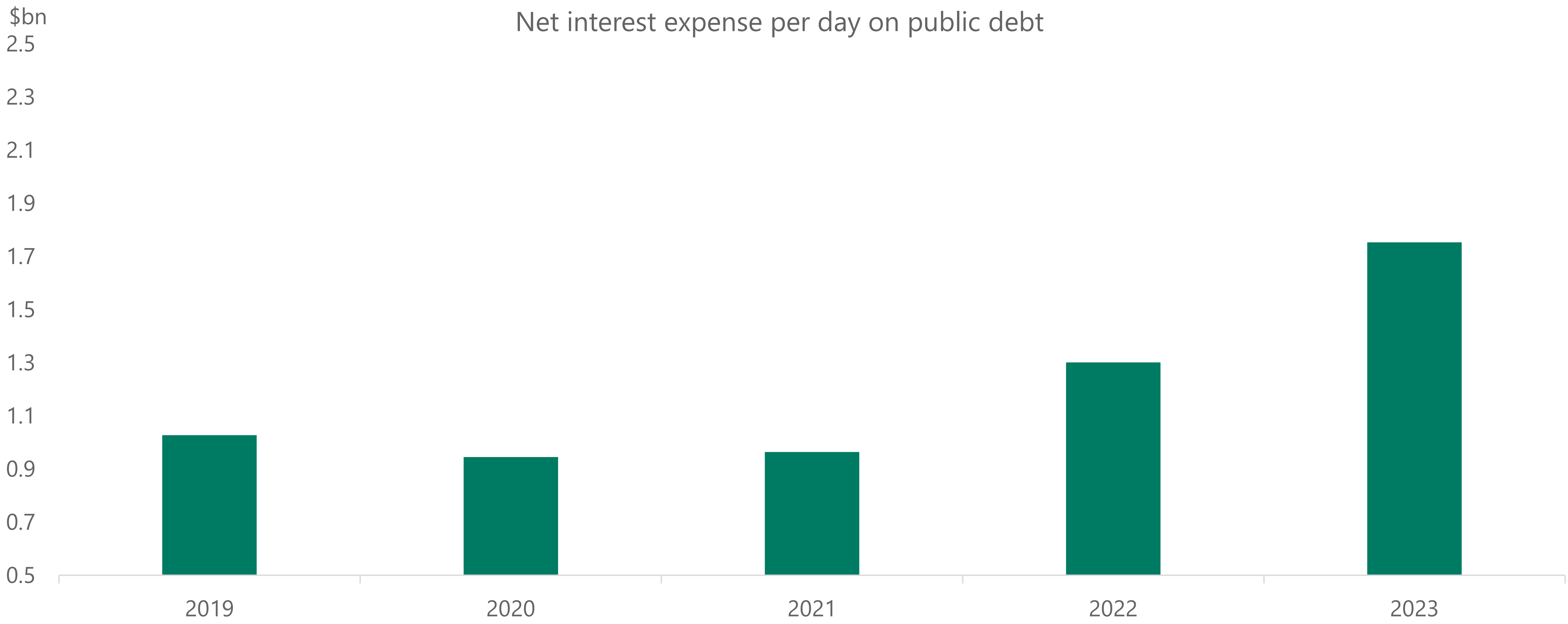
Source: Bloomberg, Philadelphia Fed Survey of Professional Forecasters, Apollo Chief Economist

Why is it taking the Fed so long time to slow down the economy?

1. High savings in the household sector, and post-covid strong demand for air travel, hotels, restaurants
2. During the pandemic, HY and IG corporates extended the maturity of their loans, making them less vulnerable to higher interest rates.
3. US households have 30-year fixed mortgages and are therefore less sensitive to Fed hikes. Higher mortgage rates for homebuyers are holding back supply of homes.
4. A growing share of capex spending is intangibles (i.e. software, R&D) which generally is less sensitive to Fed hikes
5. IRA and CHIPS Act are creating a boom in energy transition and manufacturing

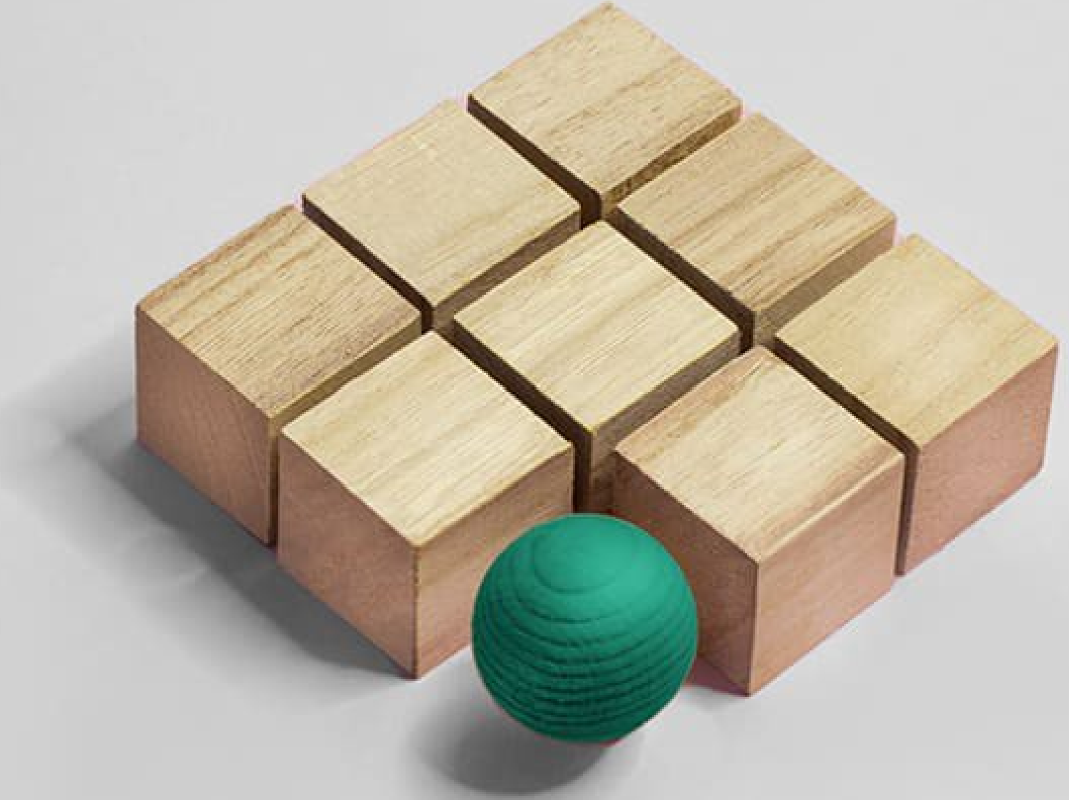
Source: Apollo Chief Economist

US government interest payments per day have doubled from $1bn per day before the pandemic to almost $2bn per day in 2023

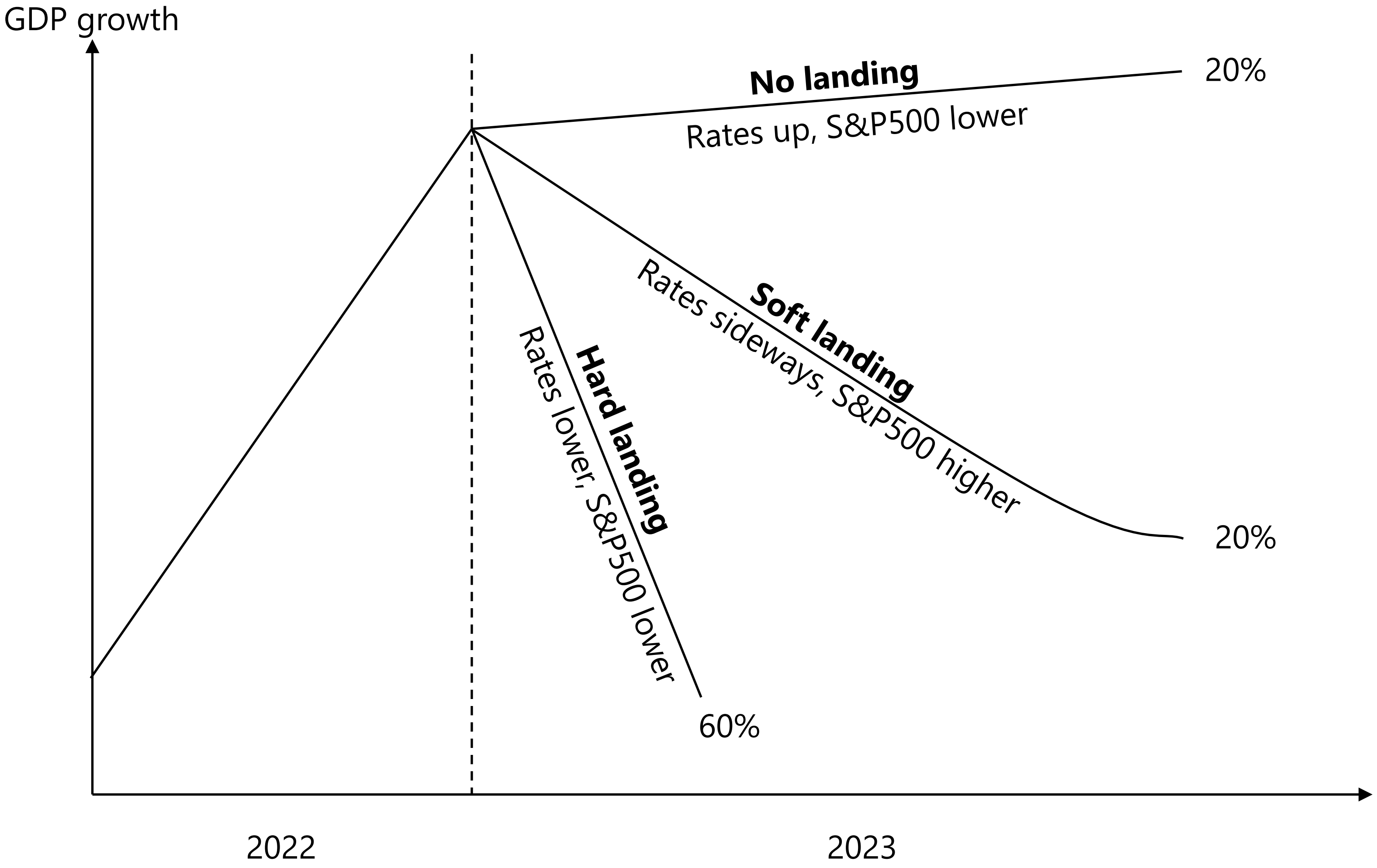


Source: CBO, Haver Analytics, Apollo Chief Economist. Note: Interest rate assumption by CBO: 2.1% in 2022 and 2.7% in 2023. Annual CBO data divided by 365.

Investment implications



Asset allocation under no landing, soft landing, and hard landing



Source: Apollo Chief Economist. Represents the views and opinions of Apollo's Chief Economist. Subject to change at any time without notice.

Torsten Slok, Ph.D.

Chief Economist
Apollo Global Management
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.