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Long-term interest rates, fiscal policy, and the term premium

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US fiscal policy is on an unsustainable path. How could this become an issue for markets?

1. **A US sovereign downgrade:** Could happen without warning
2. **Treasury auctions:** Weakness could appear without warning
3. **The term premium:** Has been trending higher
4. **The dollar:** Could decline if the US economy starts to slow down

Bottom line: So far, so good.

Unlikely we will get a debt crisis. If yields spike, will the Fed do QE?

More likely is gradually higher long-term interest rates, and a steepening of the yield curve.

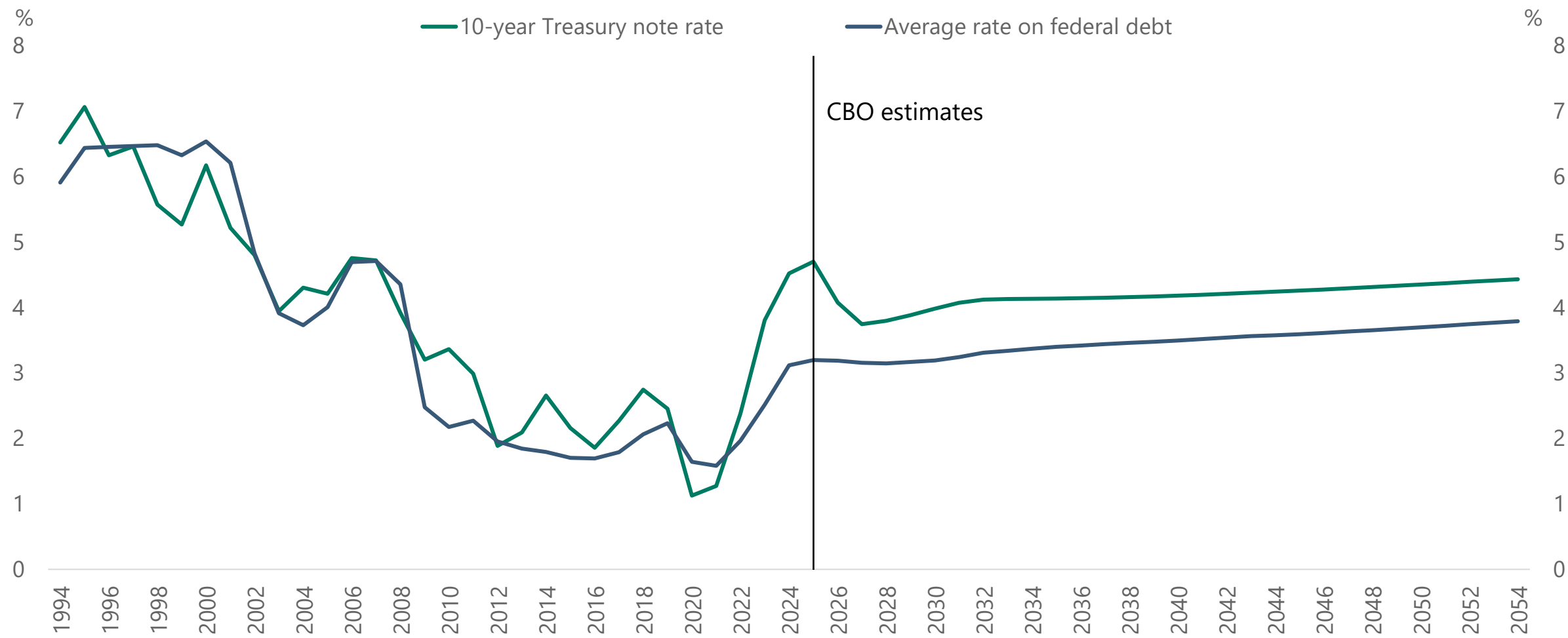
A US sovereign downgrade:

Government budget deficits, debt, and fiscal dominance

CBO: Under current policies, government debt outstanding will grow from 100% to 200% of GDP

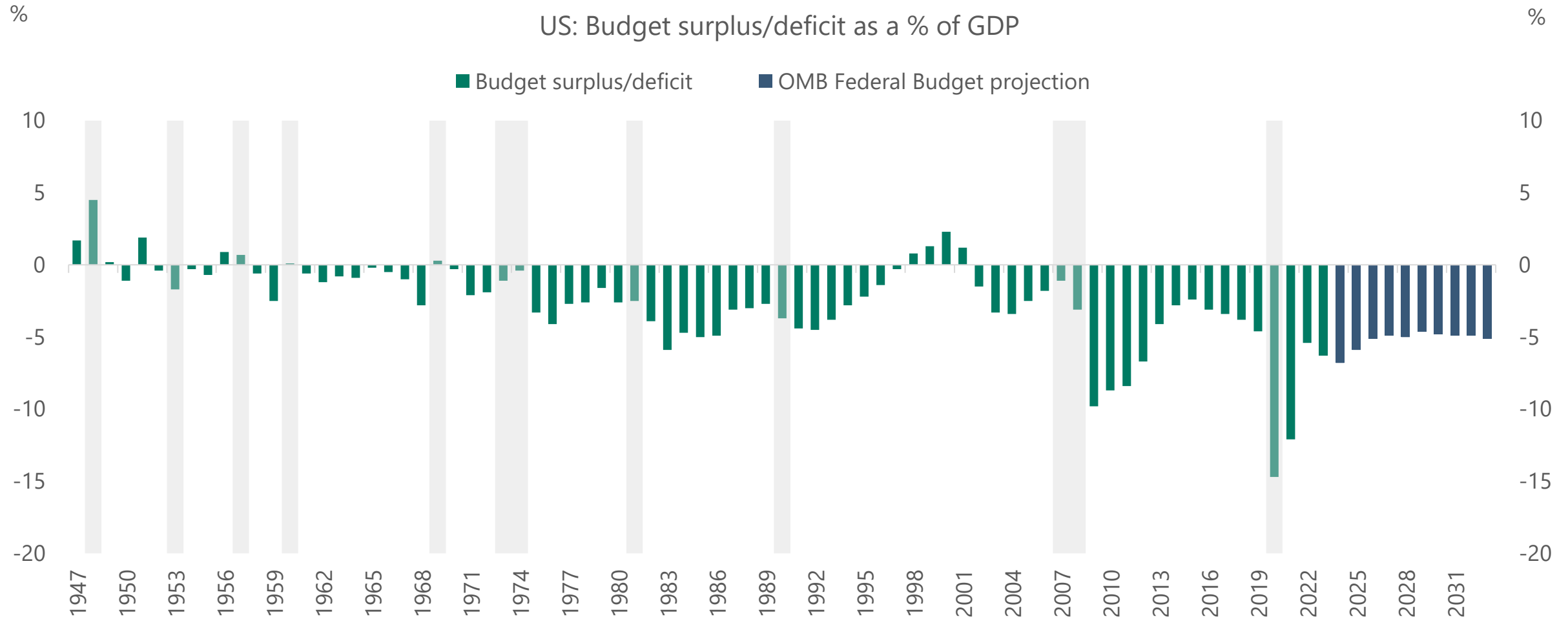


CBO interest rate assumption



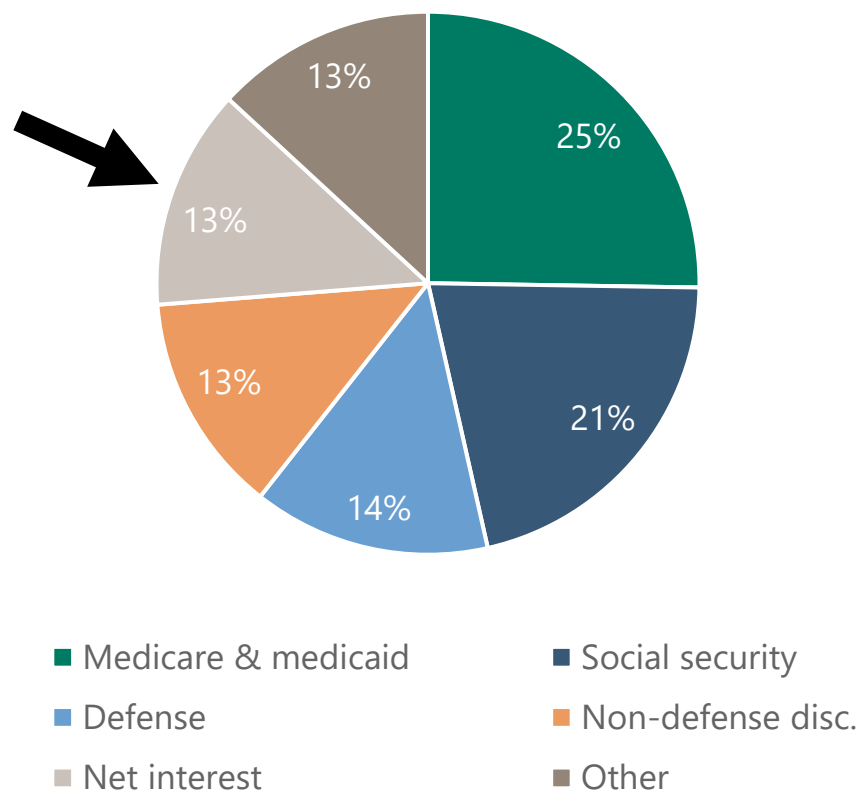
Source: The Long-Term Budget Outlook: 2024 to 2054, CBO, Apollo Chief Economist

OMB forecasts 5% budget deficit every year for the next 10 years

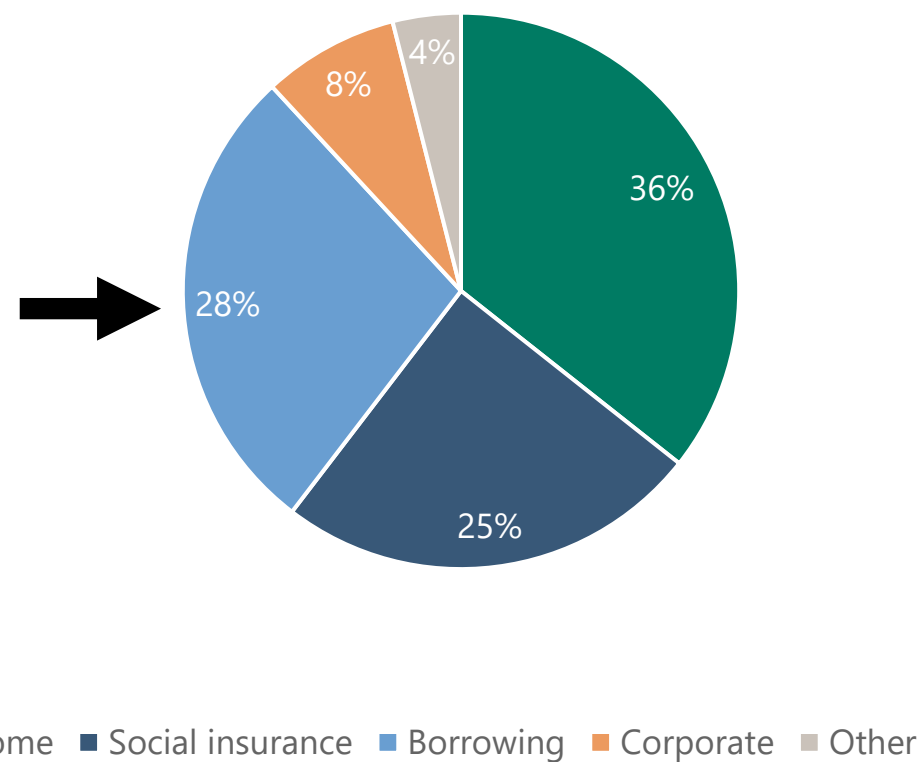


The 2024 federal budget

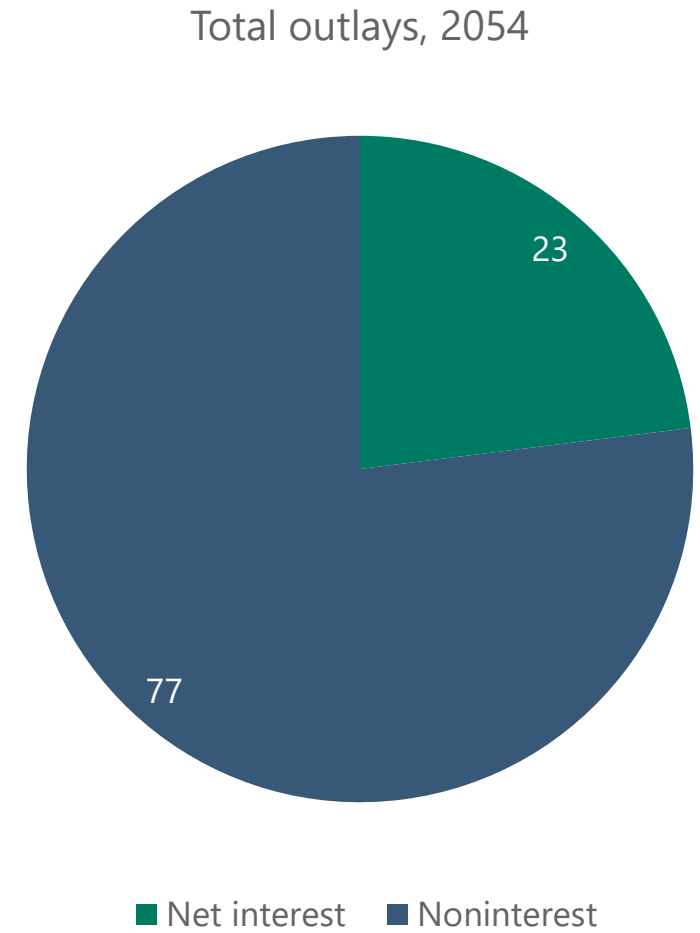
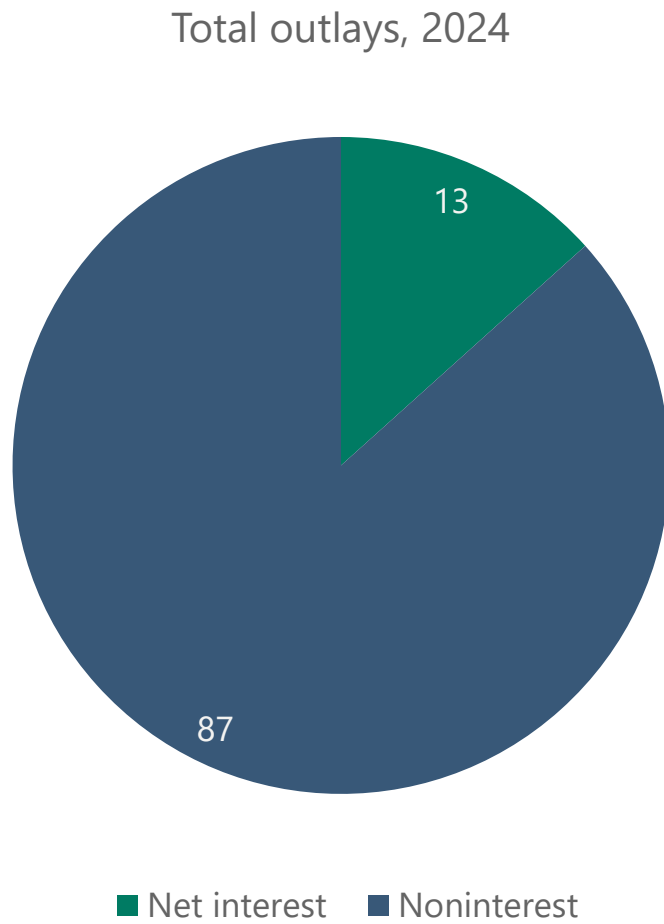
Total government spending



Sources of financing

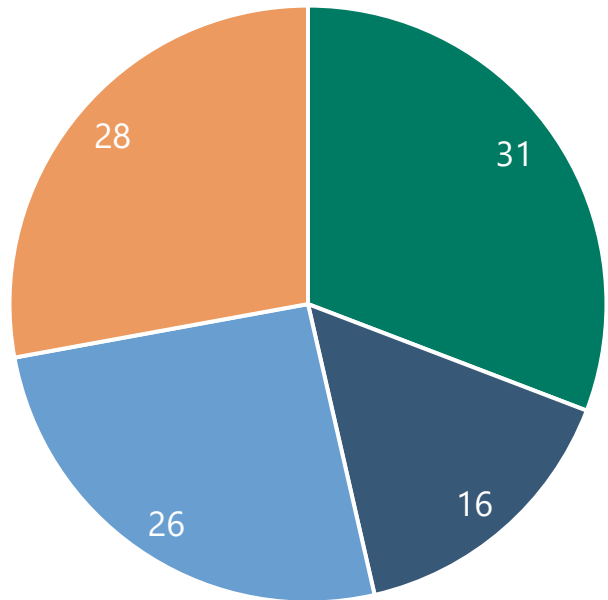


CBO: Debt servicing costs will grow as a share of total outlays over the next 30 years



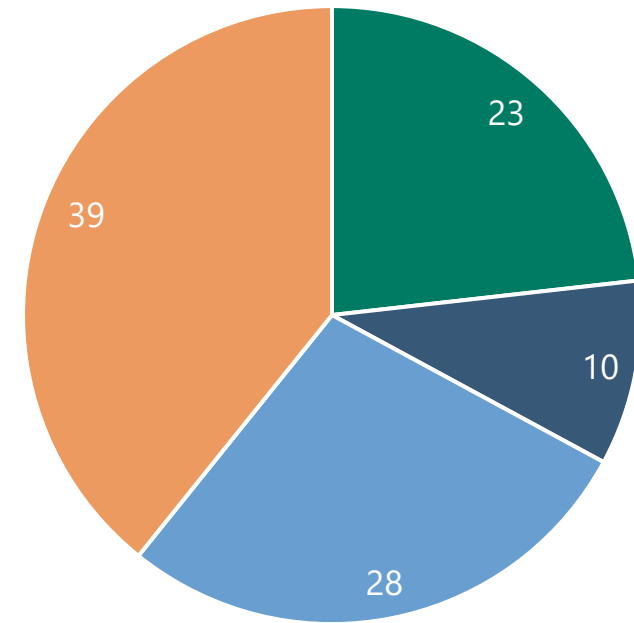
CBO: Non-interest outlays distribution, 2024 vs 2054

Total non-interest outlays, 2024



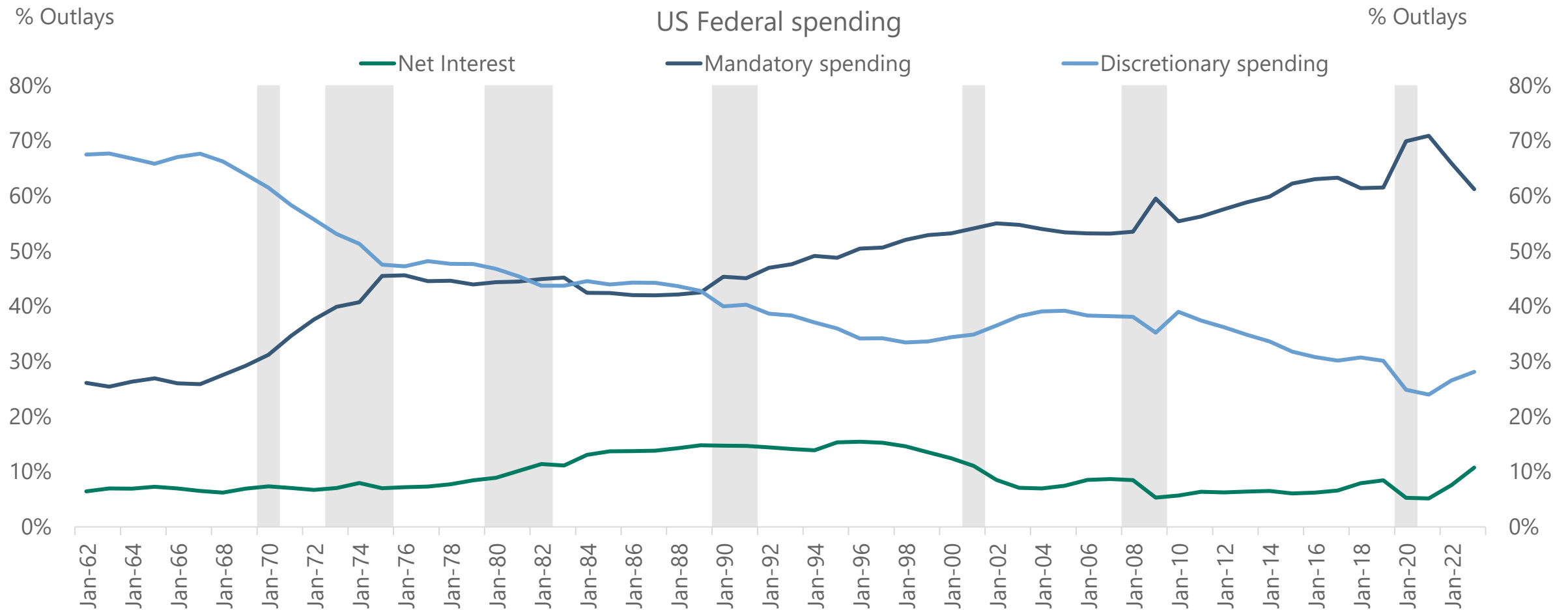
- Discretionary
- Social Security
- Other mandatory
- Major health care programs

Total non-interest outlays, 2054

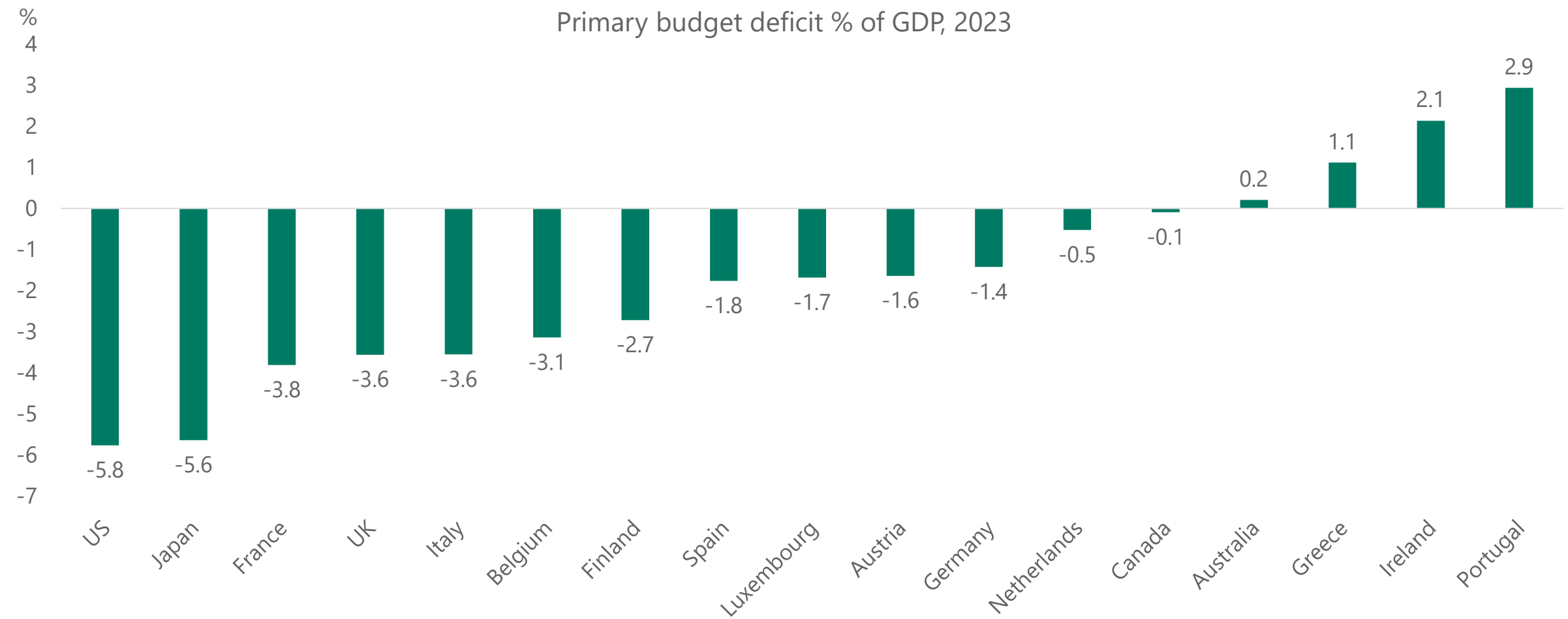


- Discretionary
- Social Security
- Other mandatory
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Discretionary government spending has declined from 70% of total outlays to 30%



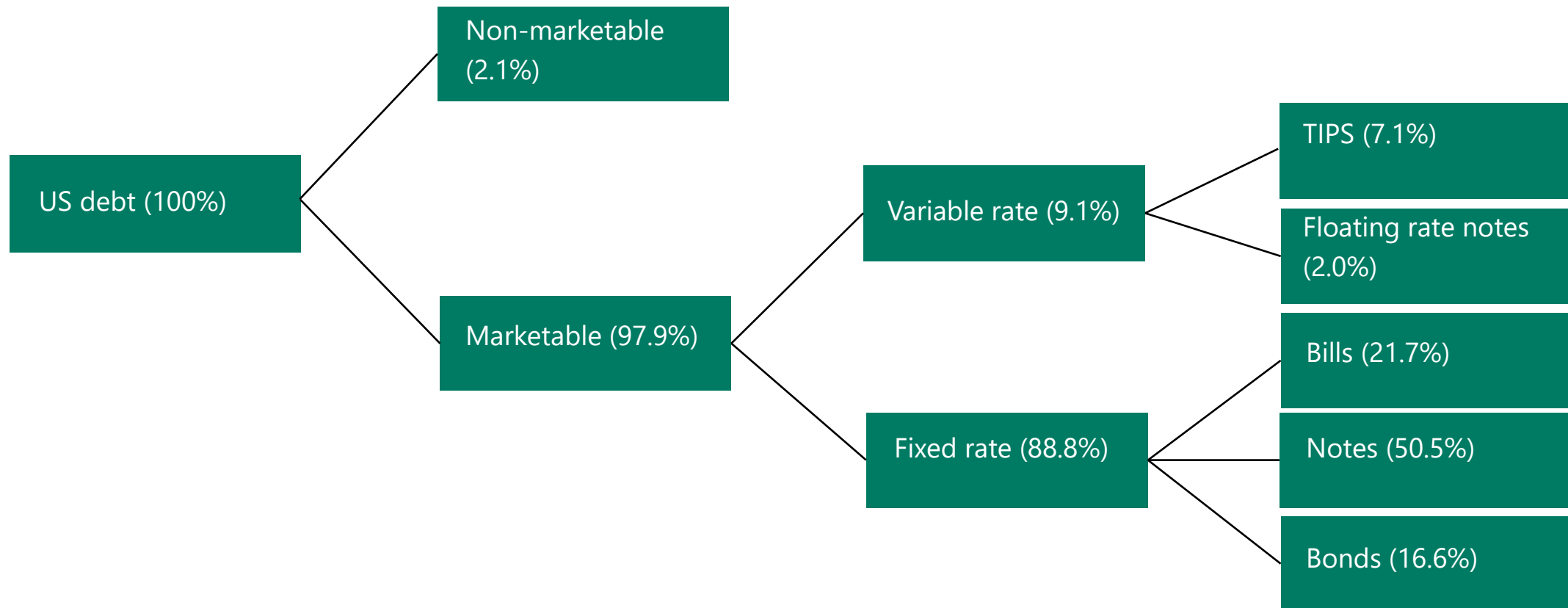
The US has a big primary budget deficit



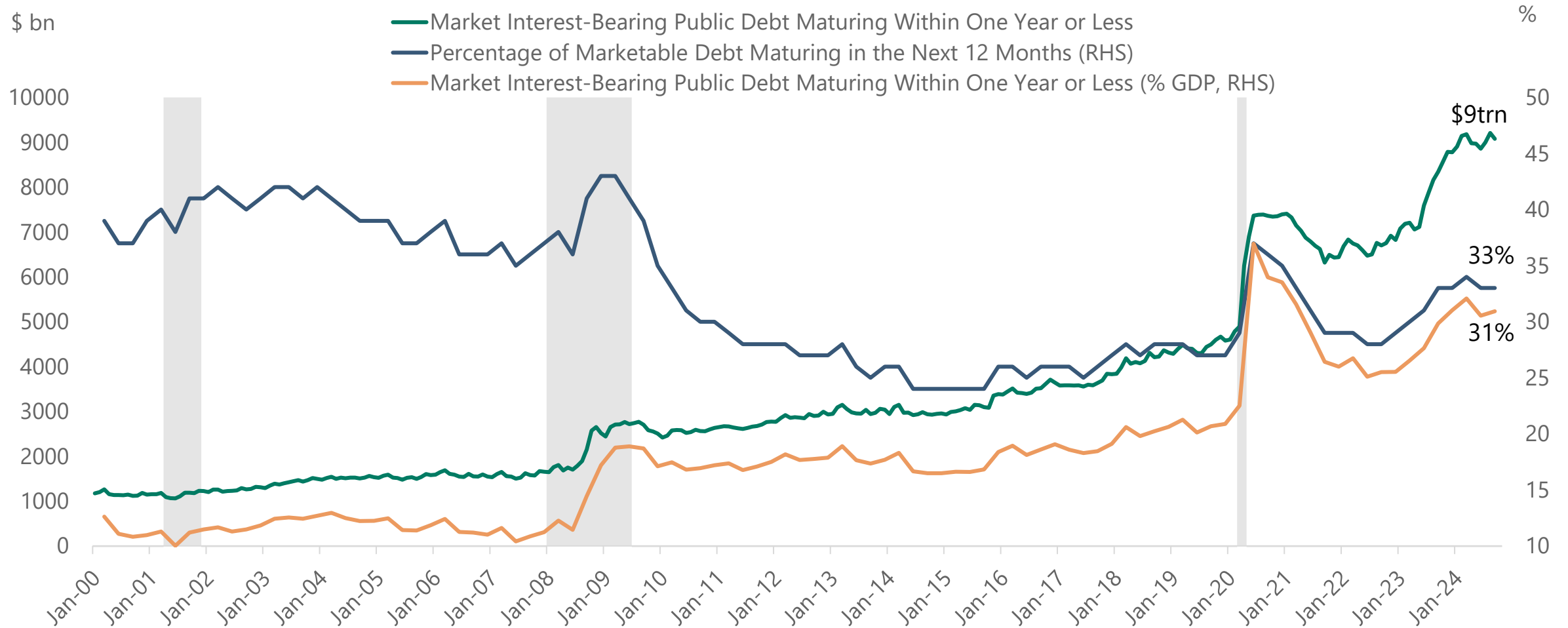
Source: IMF, Apollo Chief Economist. Note: Primary budget deficit = budget deficit excluding interest payments.

The maturity structure of US government debt

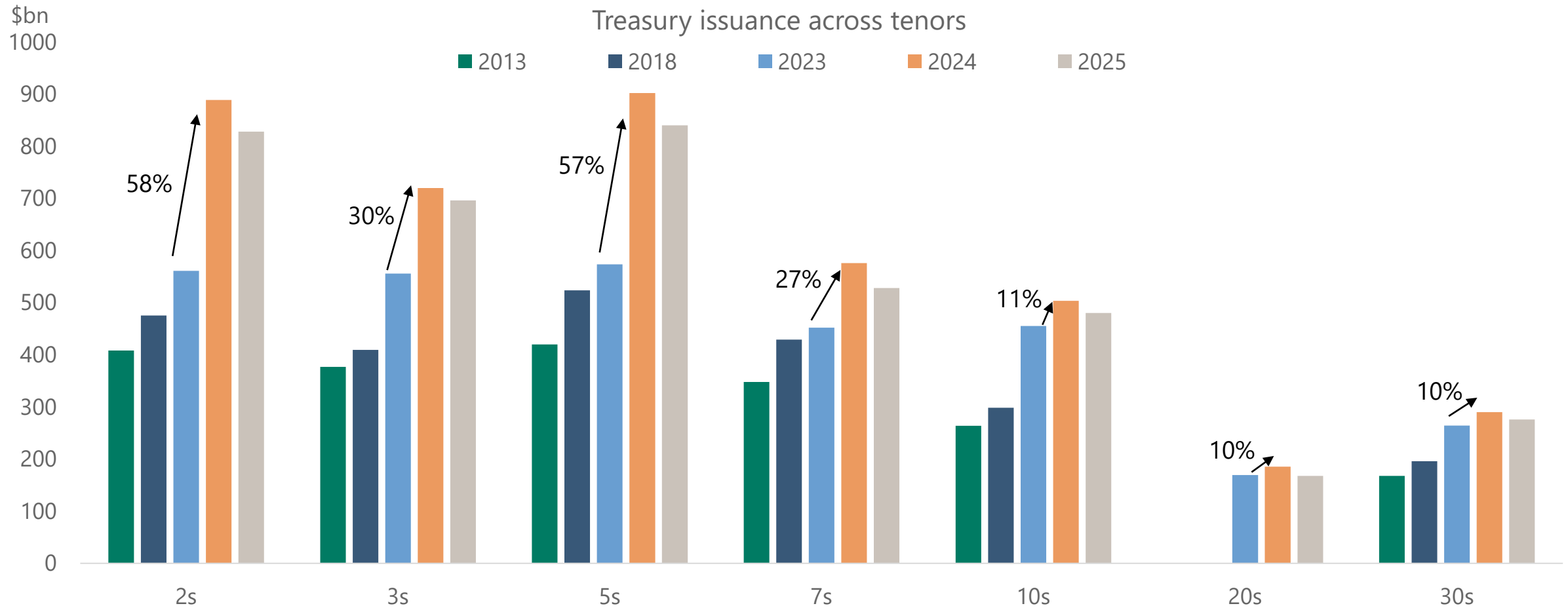
How big a share of US government debt is fixed rate? And how much is in bills, notes, and coupons?



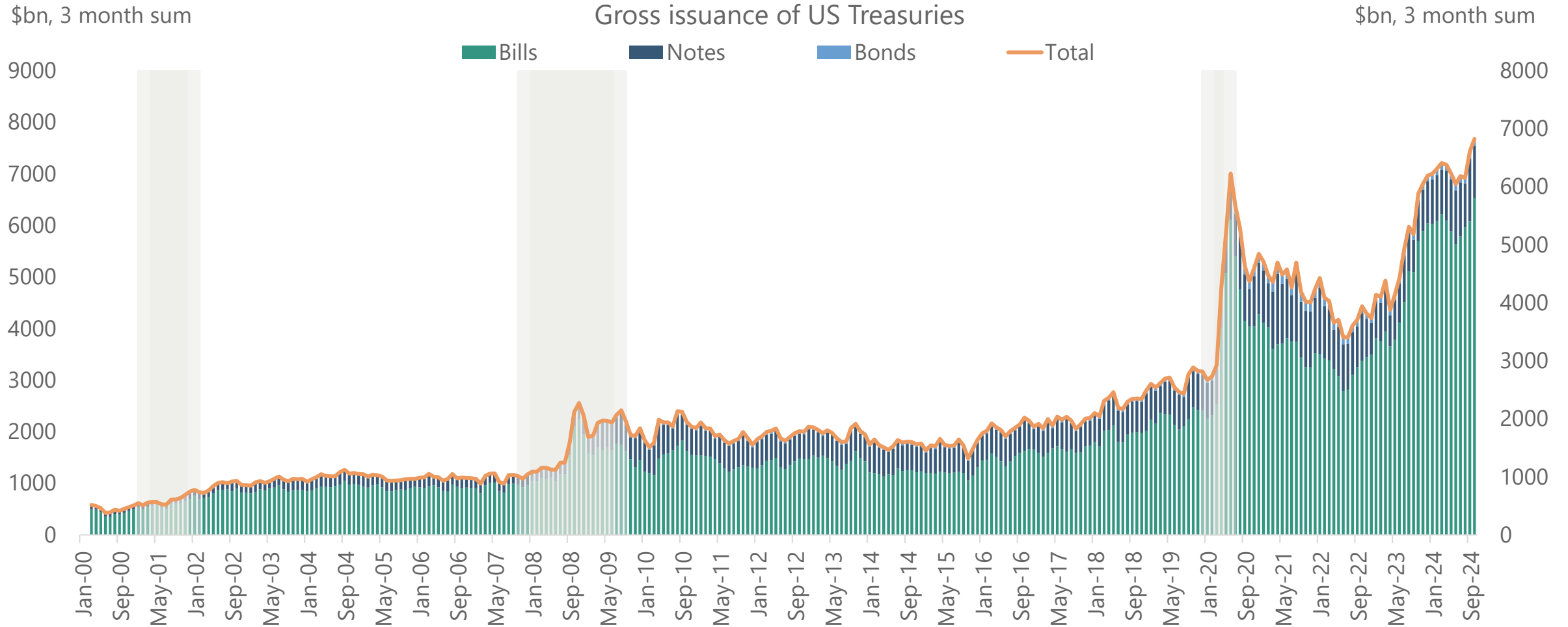
\$9trn of government debt will mature over the next year



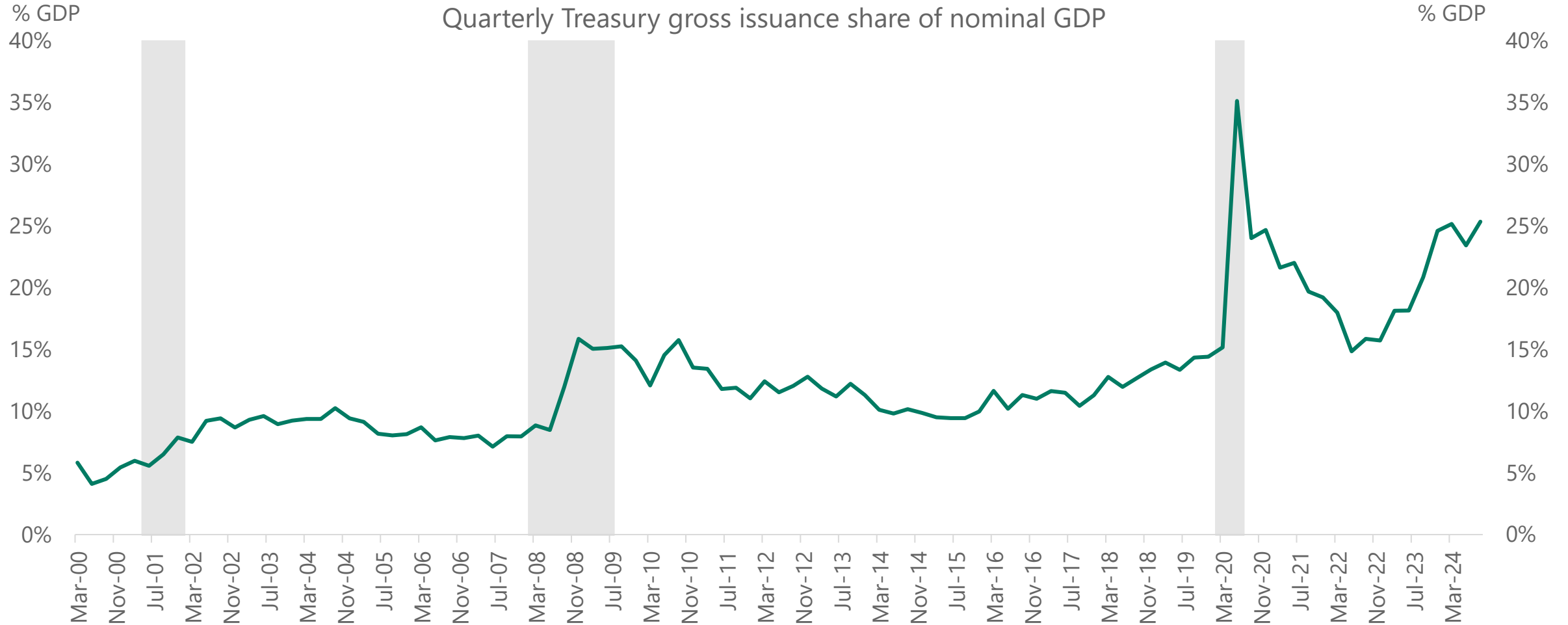
Treasury auction sizes have increased on average 29% across the yield curve in 2024



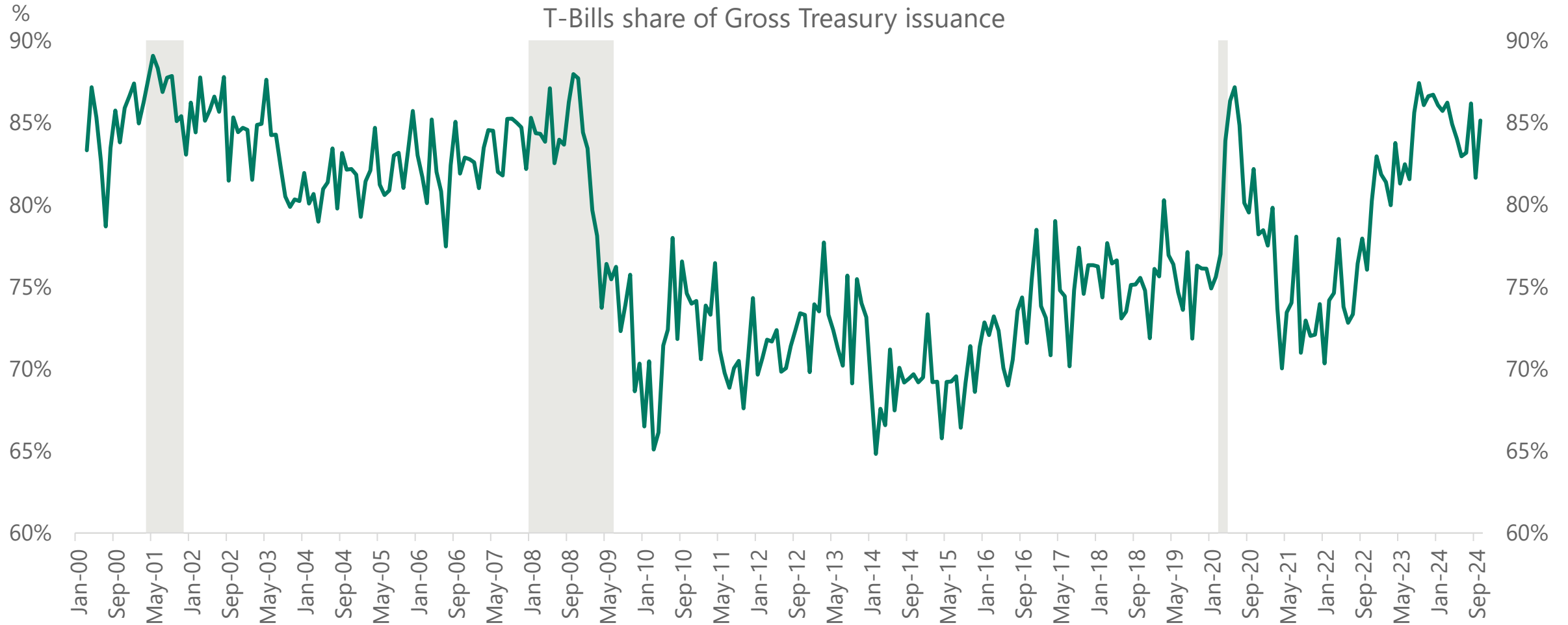
Gross issuance of Treasuries



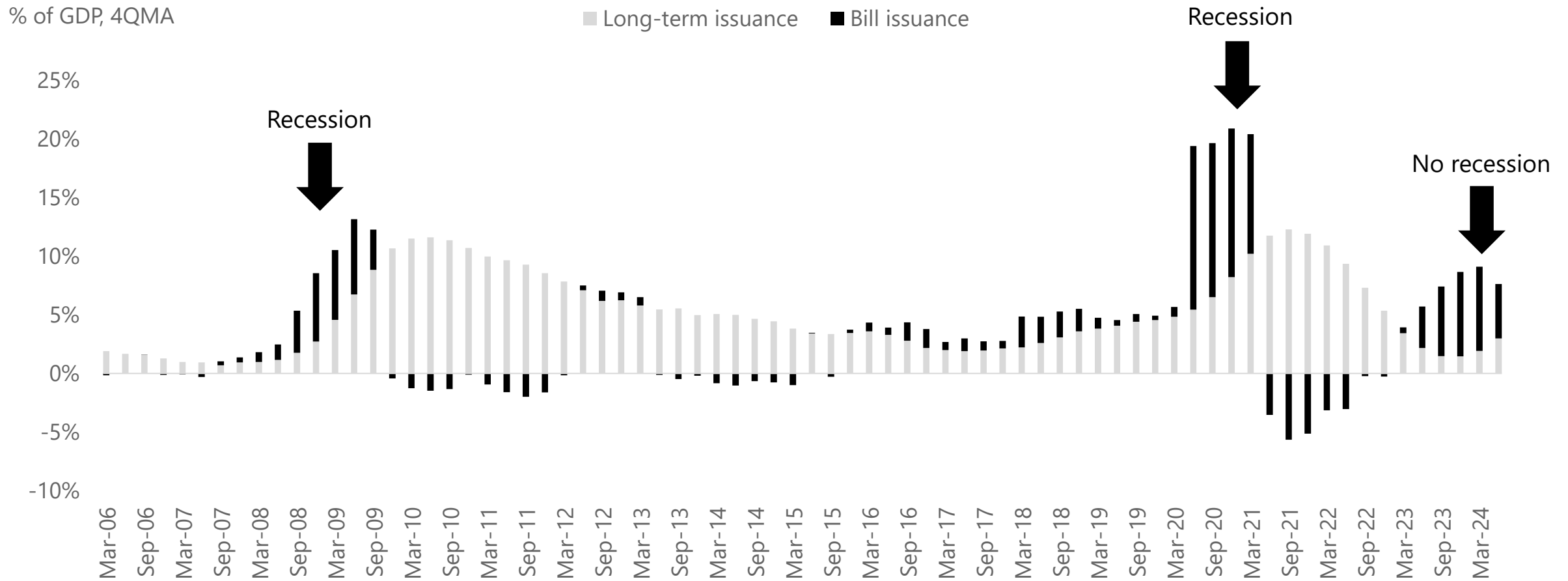
Quarterly gross Treasury issuance as a share of nominal GDP



High share of Treasury issuance is T-bills

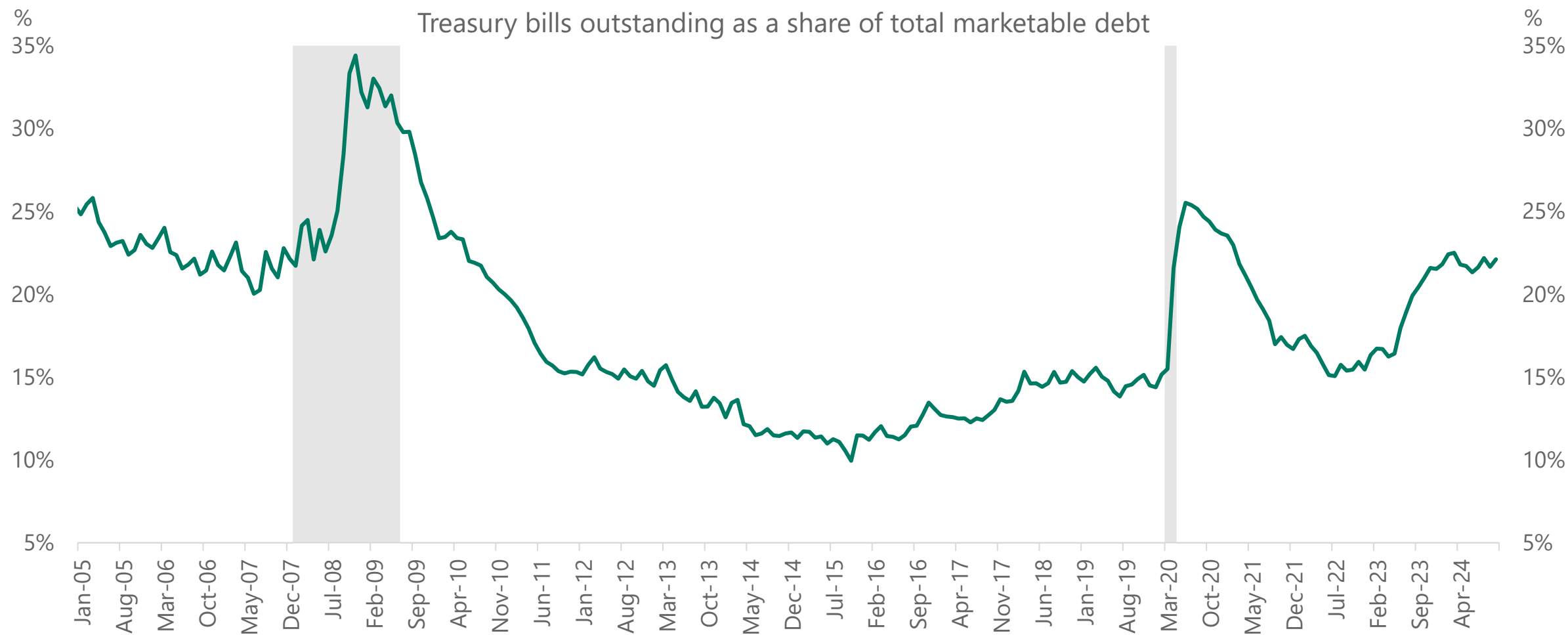


Normally, the Treasury only issues a lot of T-bills during recessions

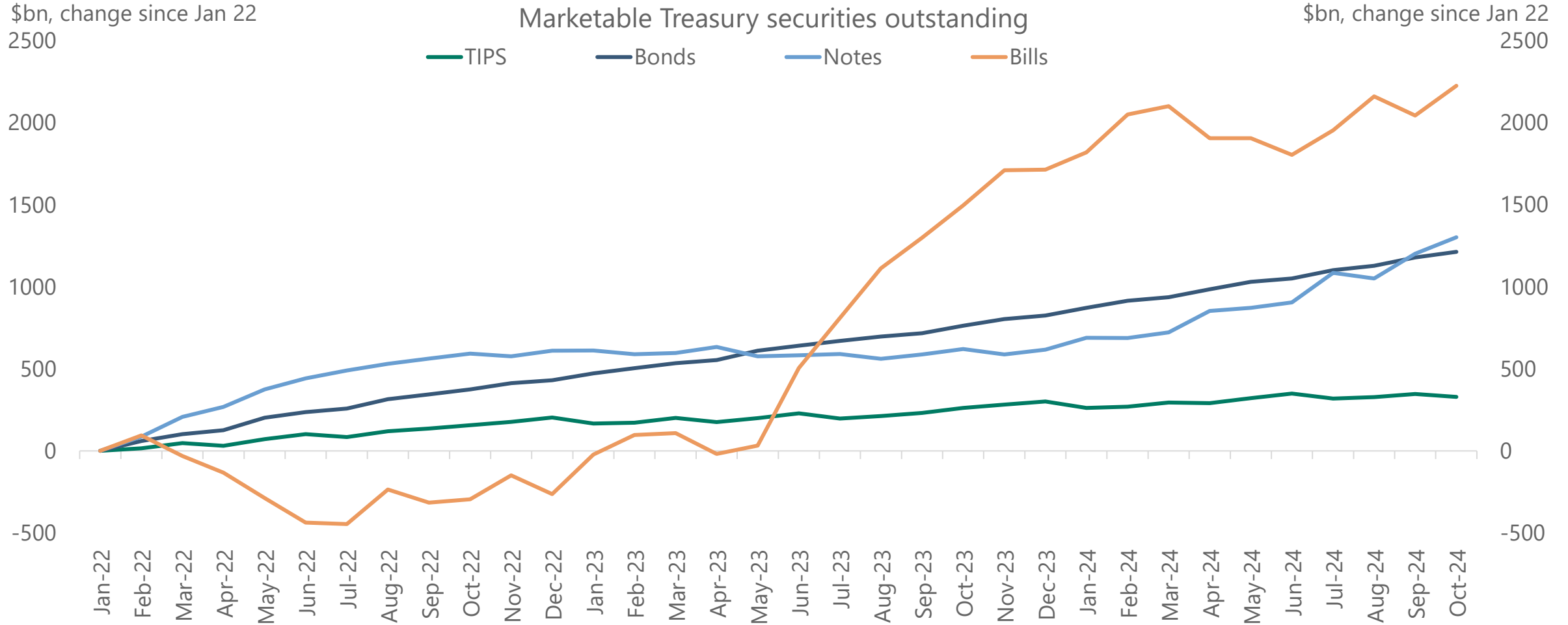


Source: Haver Analytics, Apollo Chief Economist.

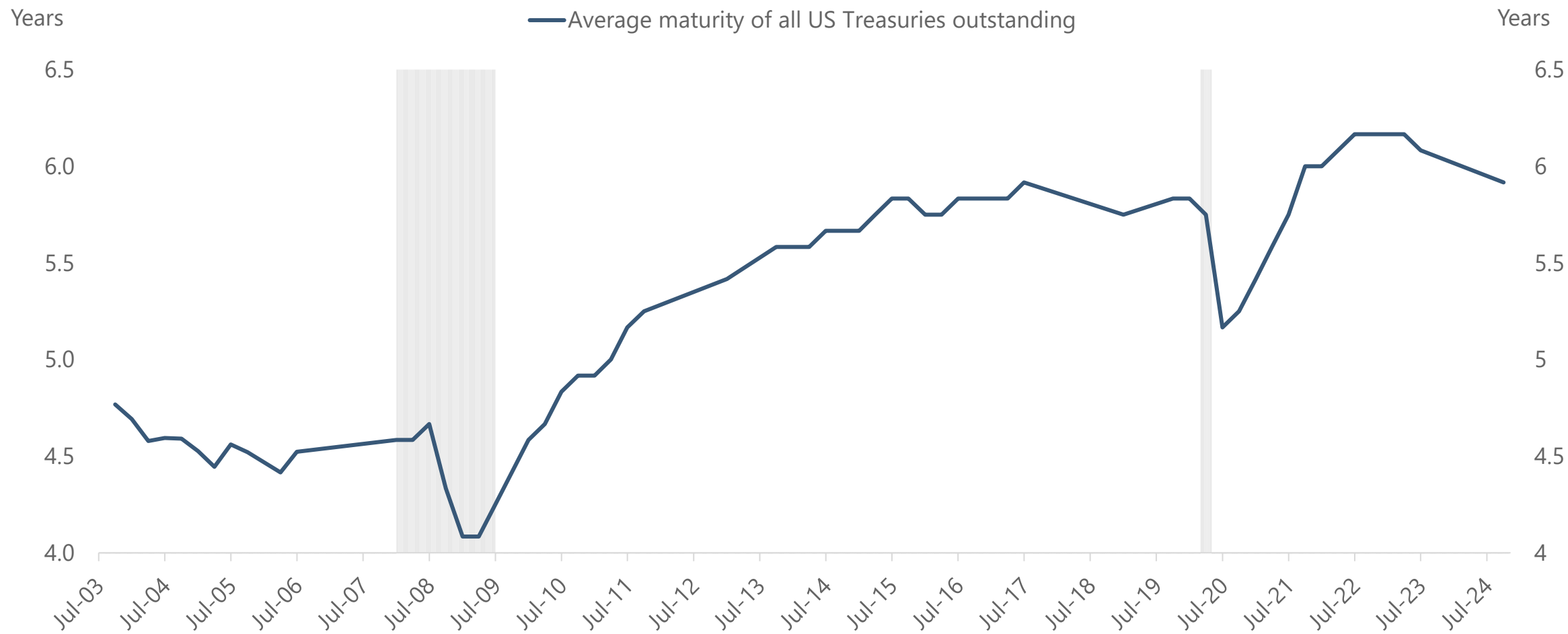
Share of T-bills outstanding has increased significantly



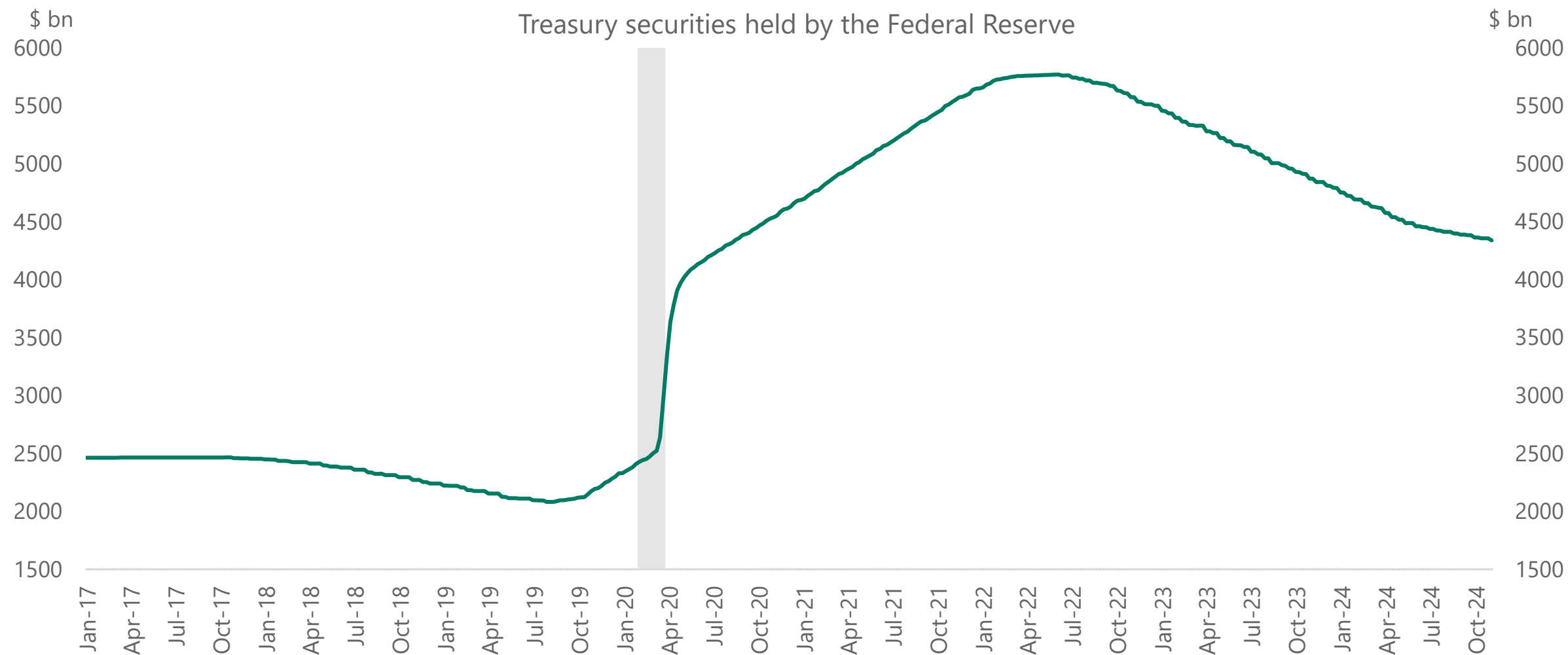
Significant increase in the supply of T-bills



Weighted average maturity of debt outstanding declining

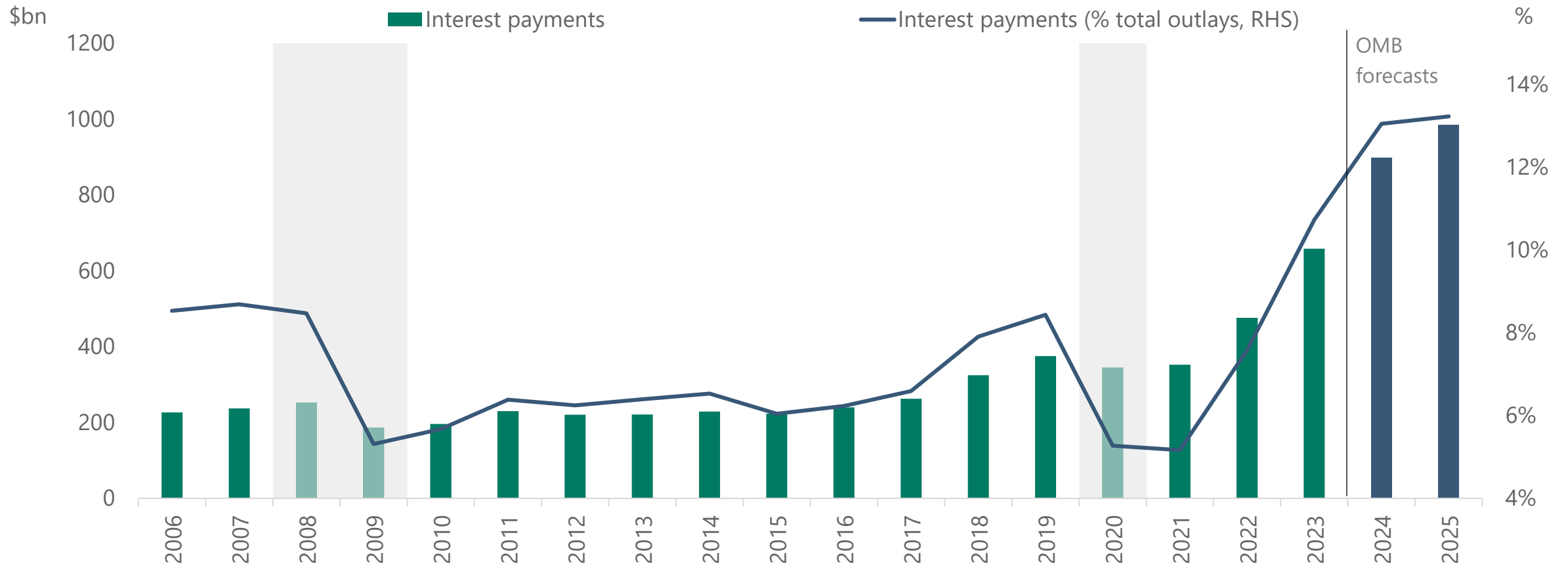


More Treasury supply coming from QT

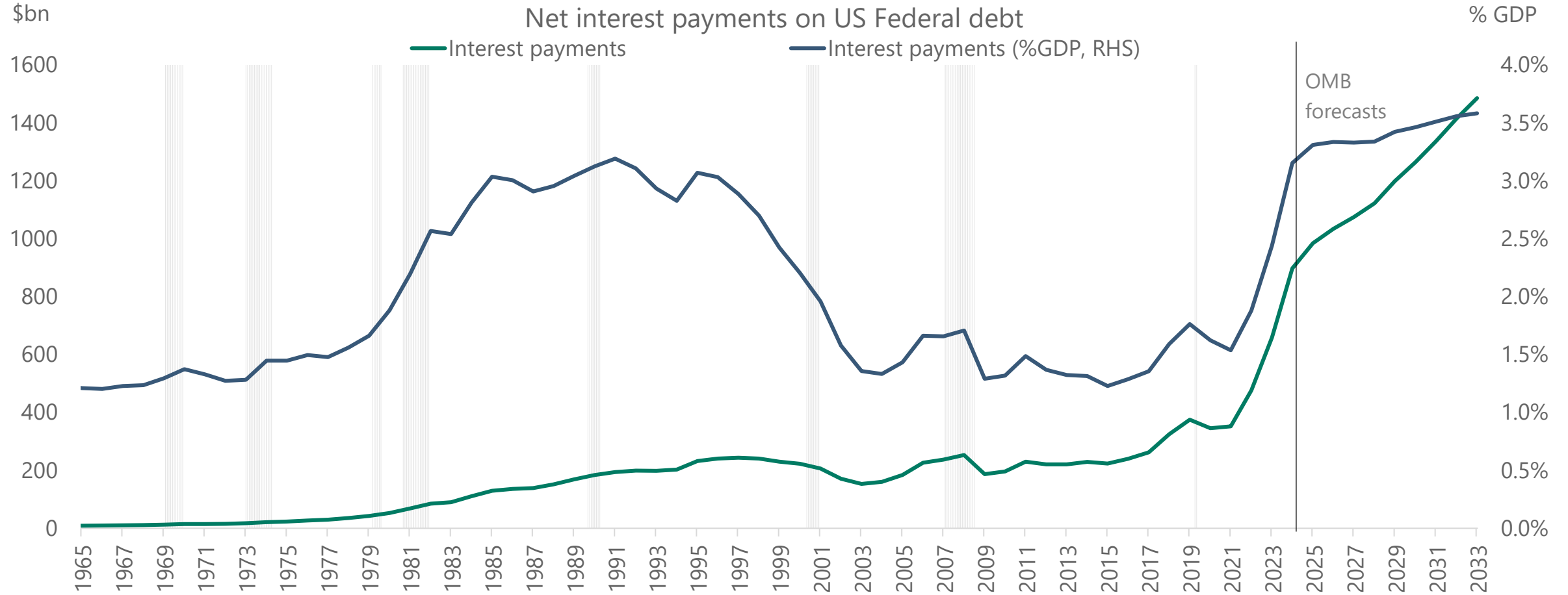


Debt servicing costs rising

Government debt servicing costs making up 13% of government spending



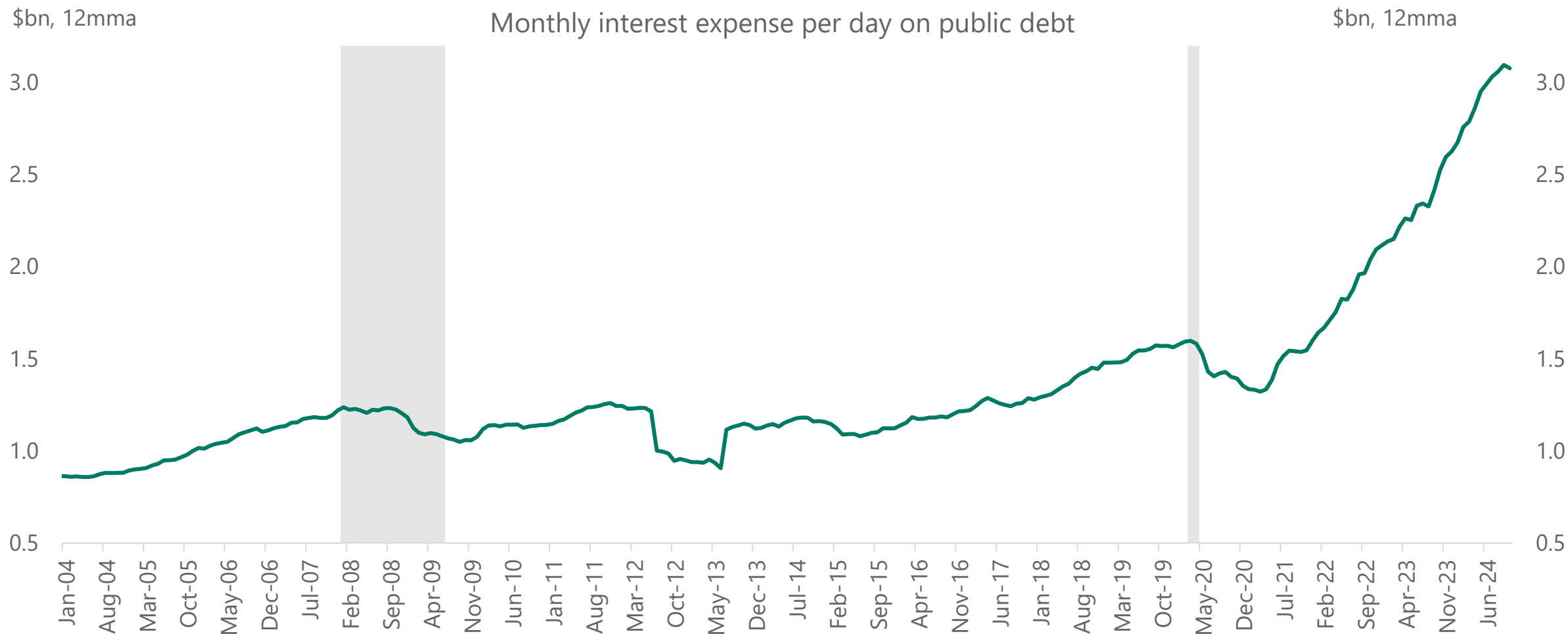
Debt servicing costs rising



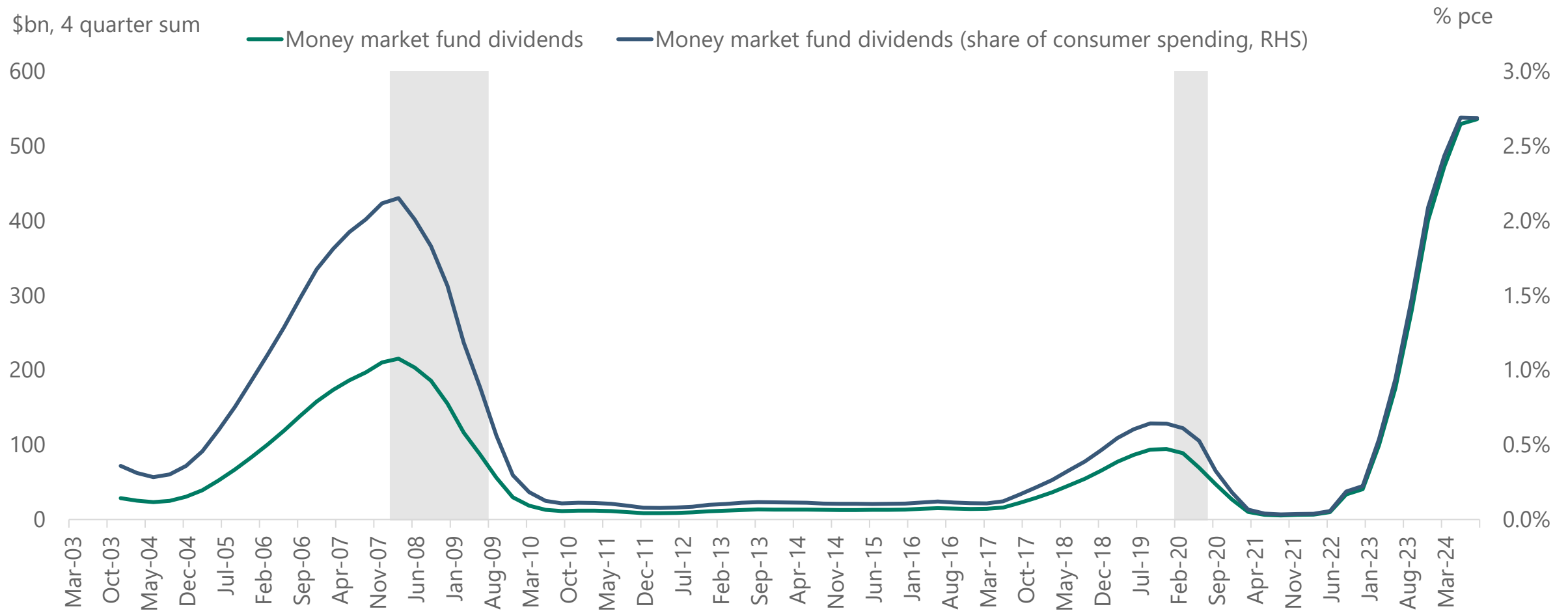
Higher interest rates putting upward pressure on interest payments



Average monthly interest expense per day over \$3bn

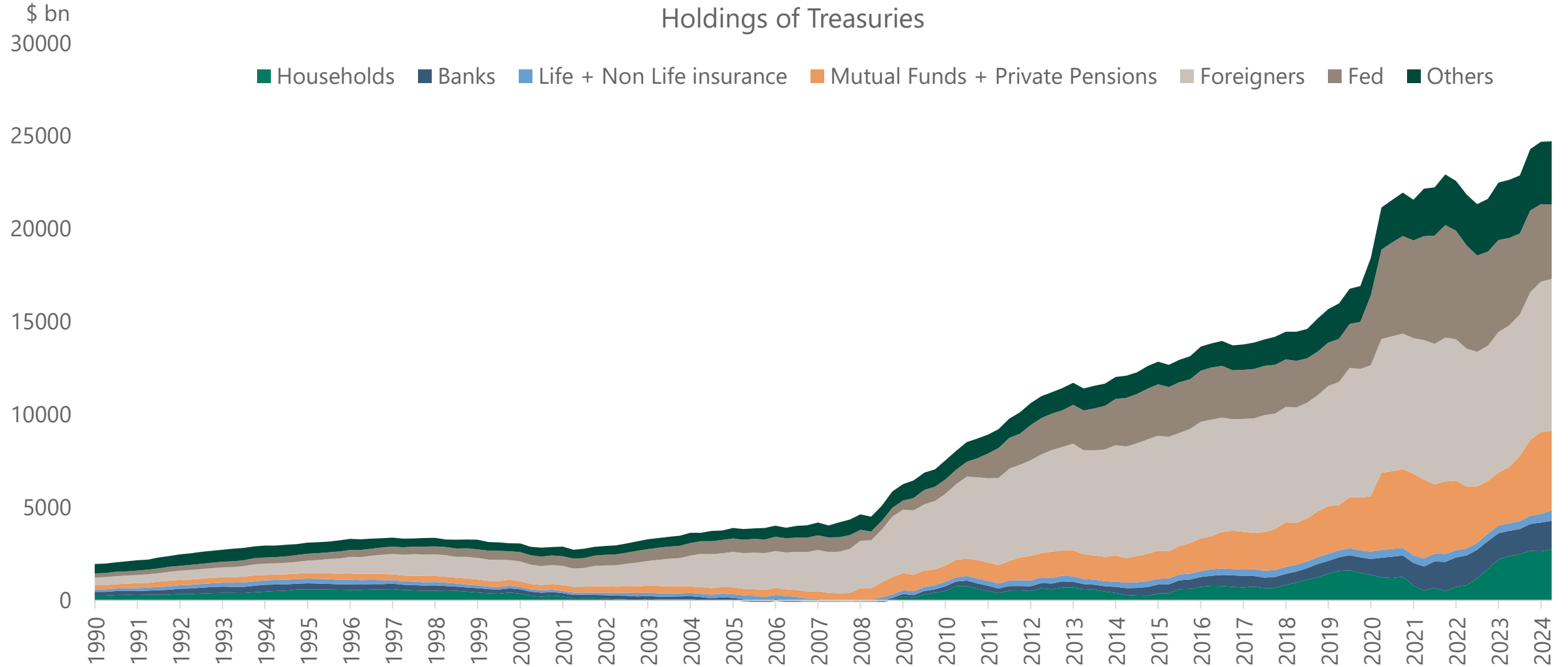


Money market funds currently pay around \$500bn in dividends.
That's 2.5% of annual consumer spending.

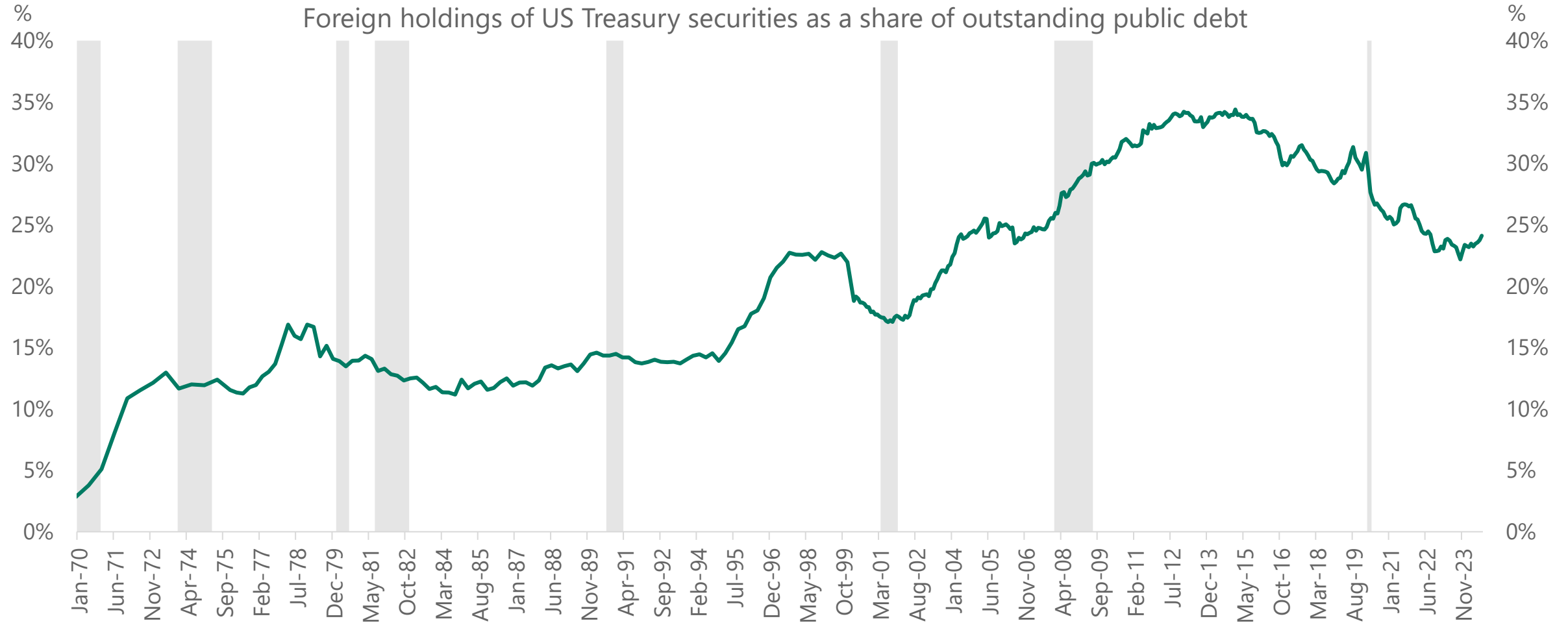


Who owns US government debt?

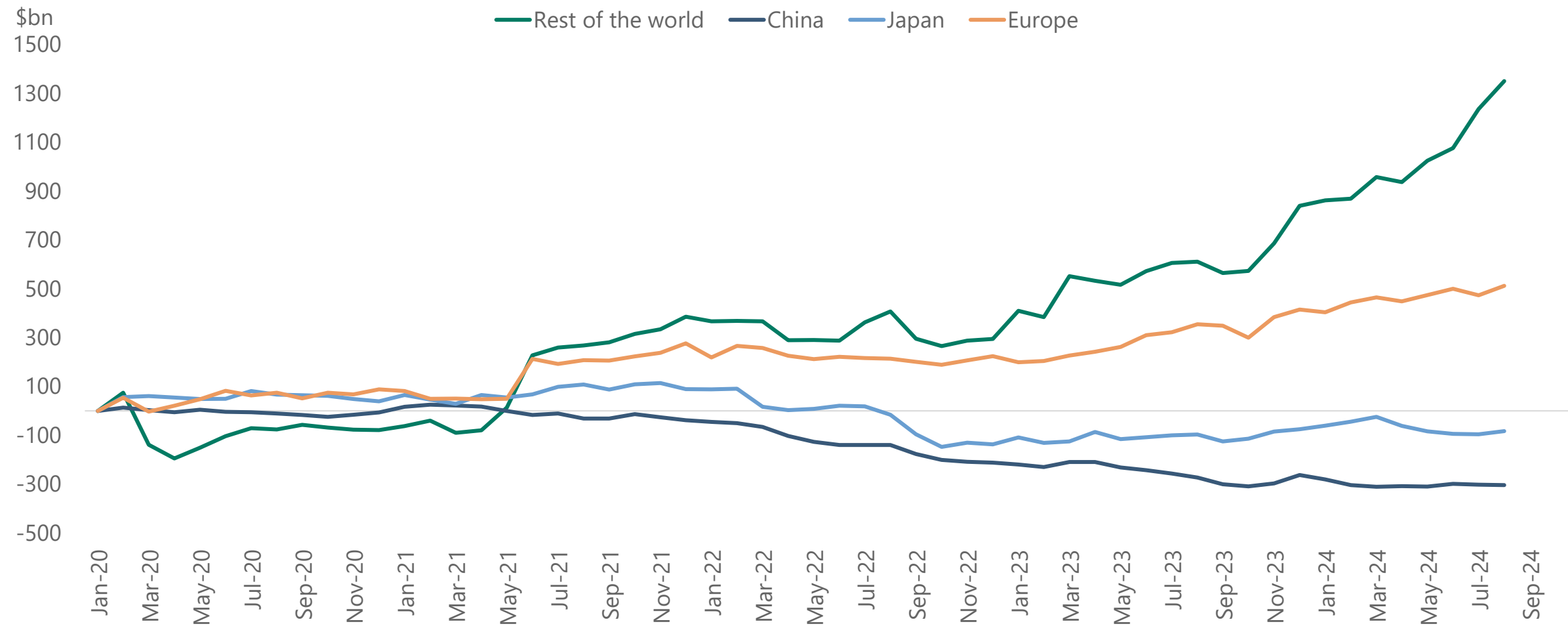
Who owns the \$25trn Treasuries outstanding?



Trend decline in foreign ownership of US government bonds since 2015



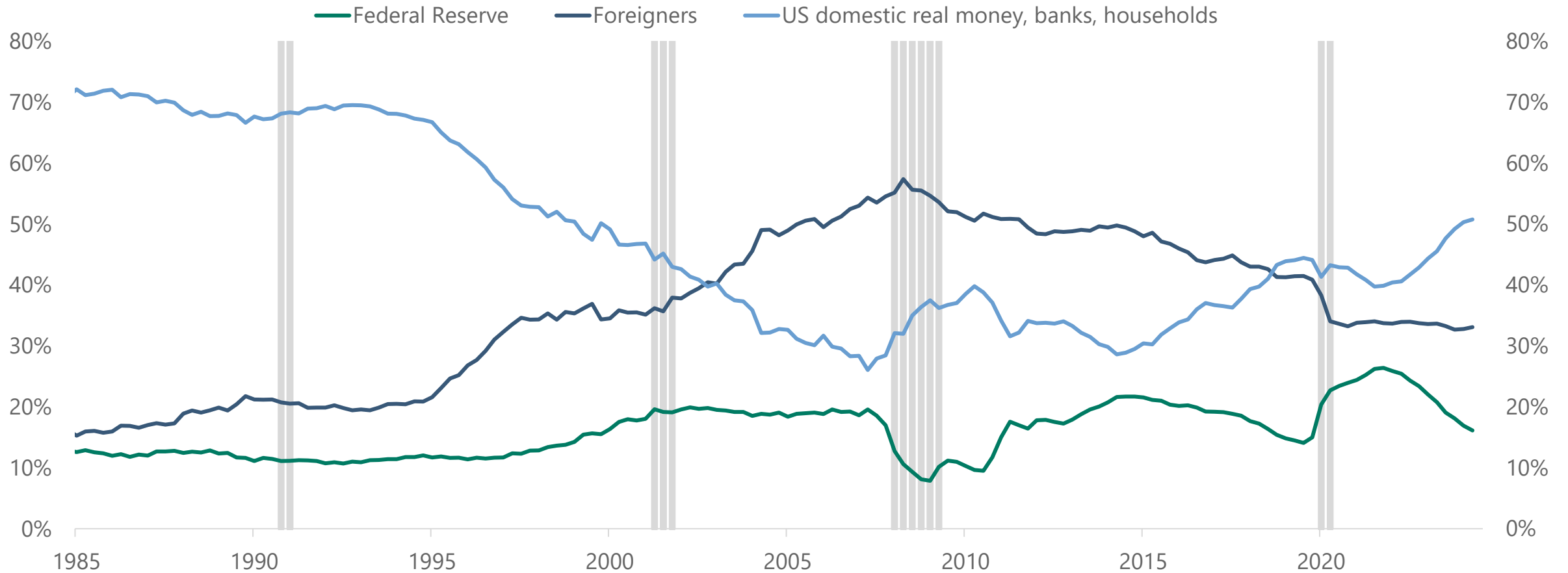
Change in foreign holdings of Treasuries since January 2020



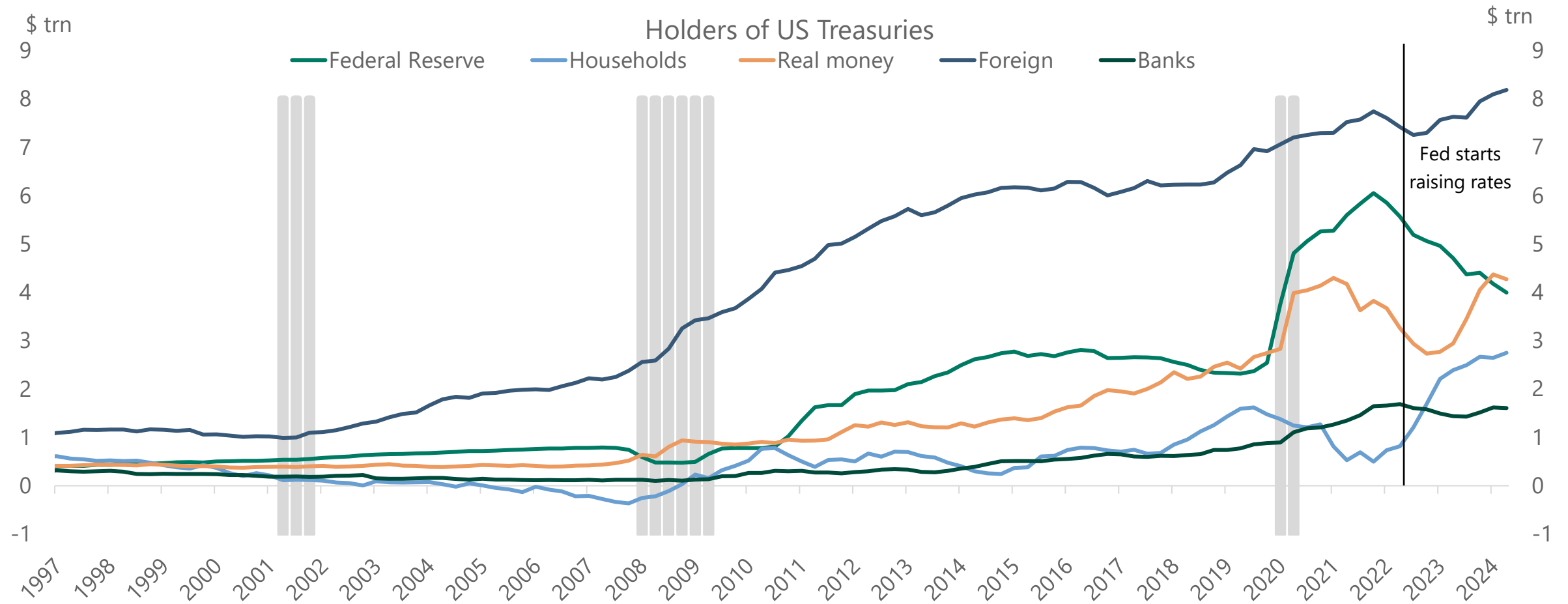
Source: U.S. Treasury, Haver Analytics, Apollo Chief Economist

Fed selling Treasuries (doing QT). Domestic investors buying Treasuries

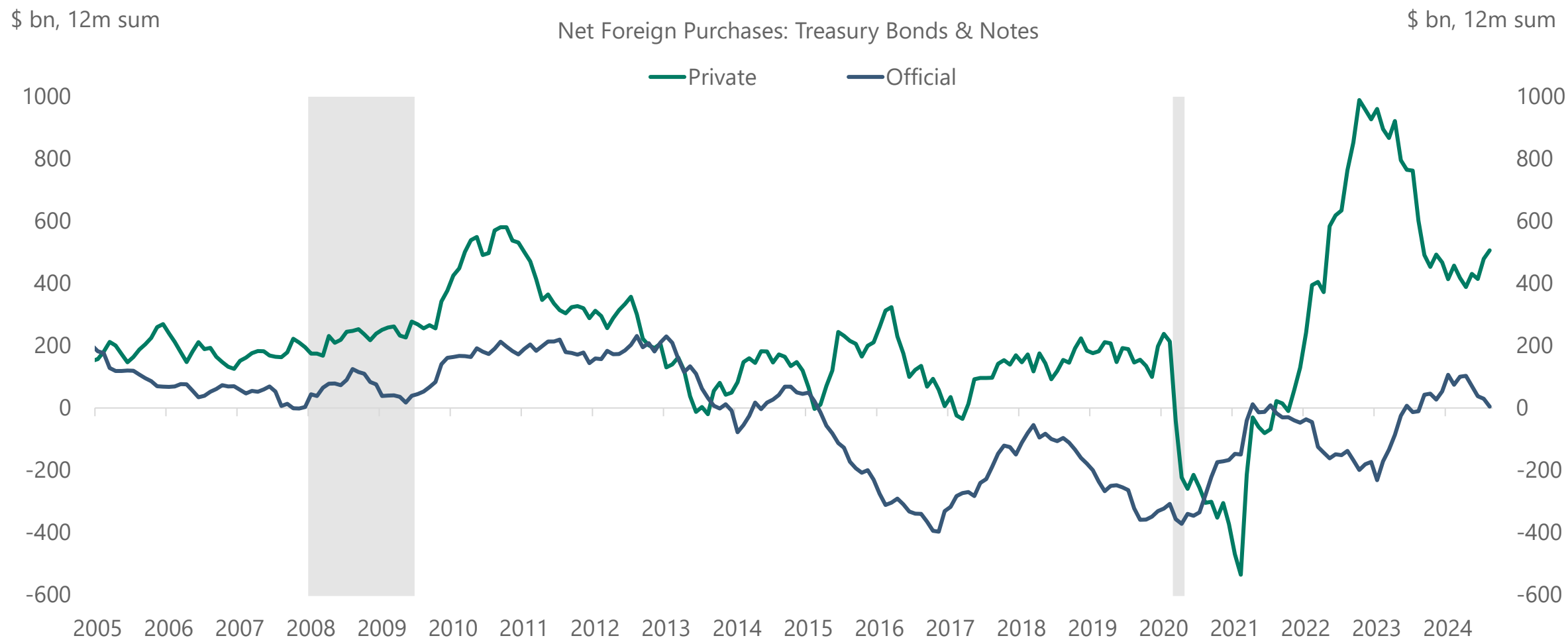
Holdings of Treasuries (% Treasury debt outstanding)



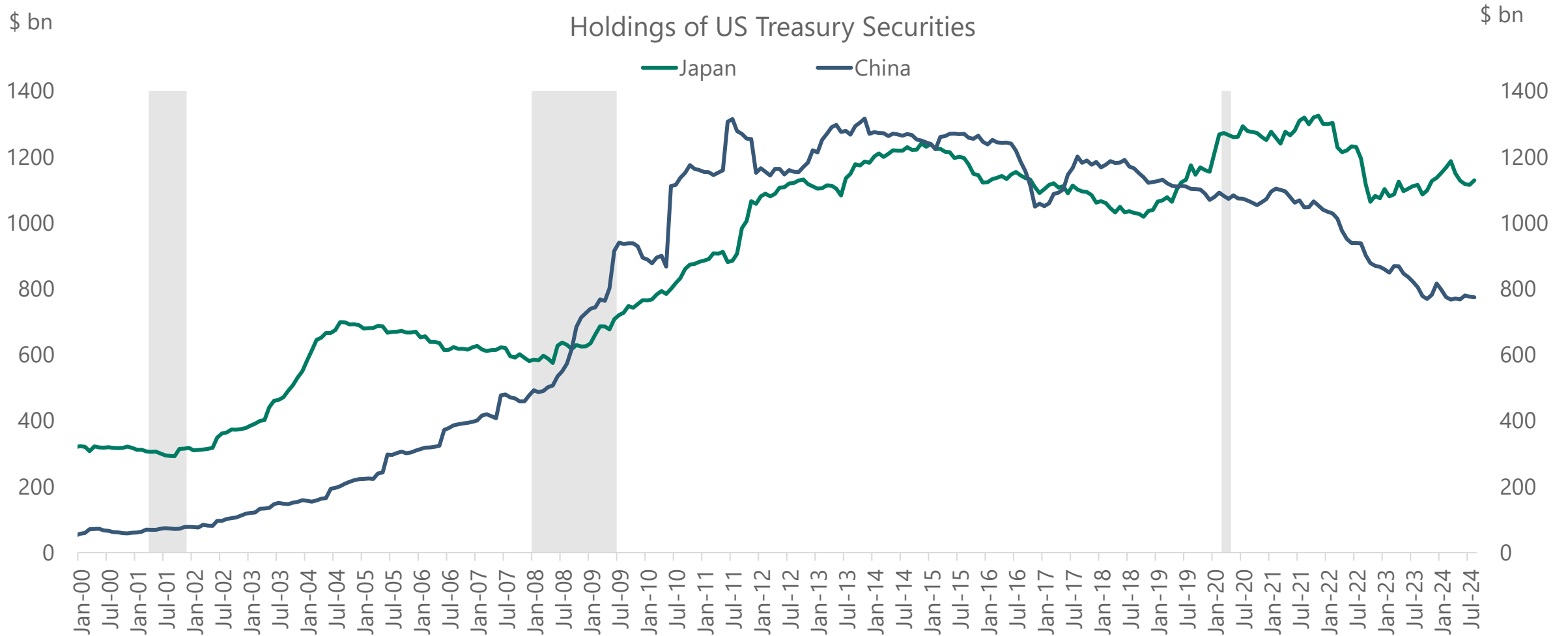
US households, foreigners, and real money buying Treasuries. Fed selling Treasuries



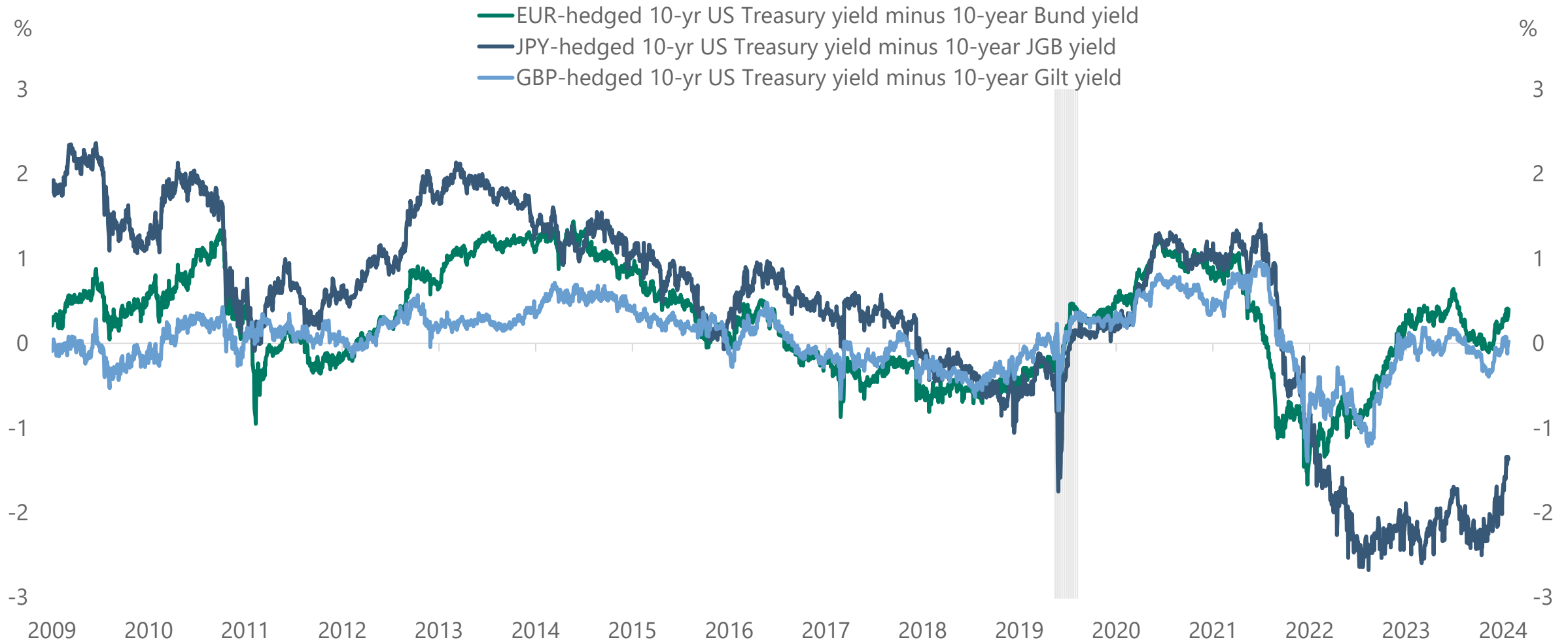
Foreign purchases of Treasuries come mainly from the private sector



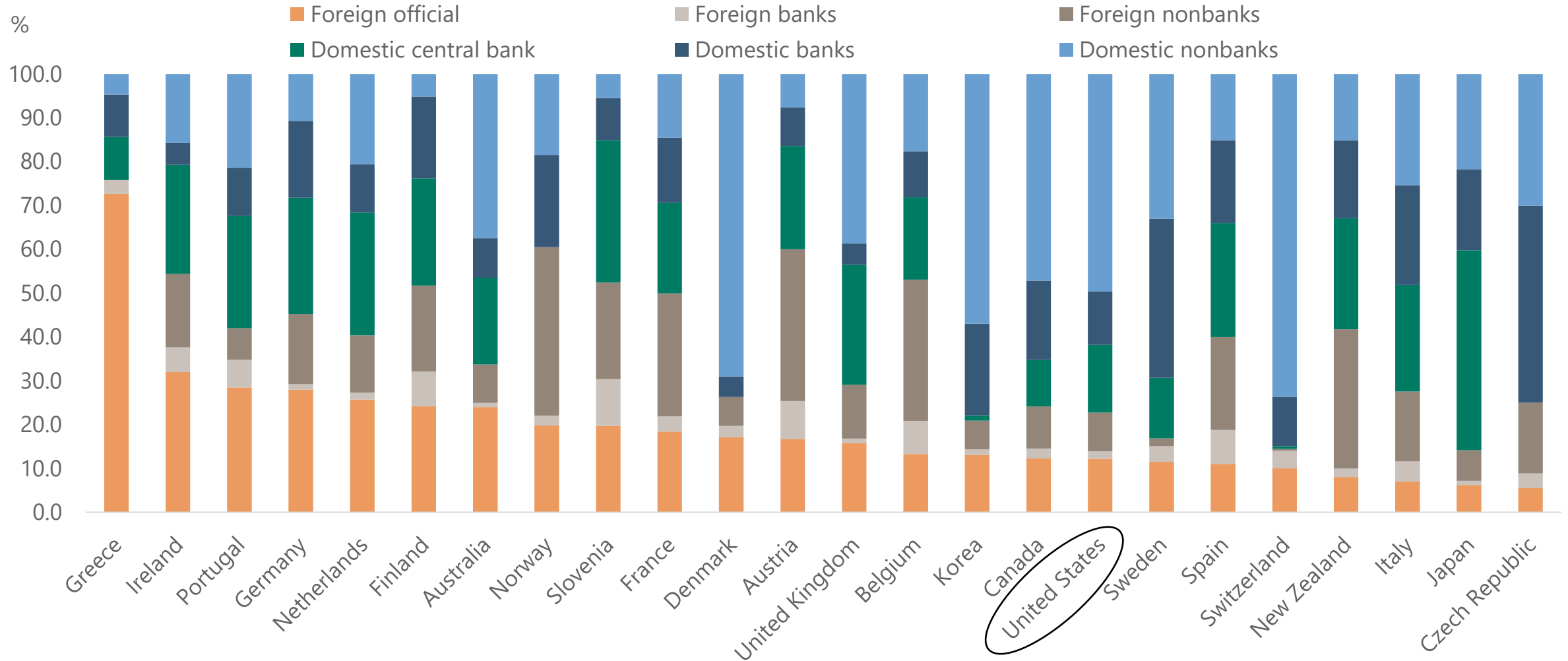
Japanese and Chinese holdings of Treasury securities



Hedging costs are high for Japanese investors buying US Treasuries

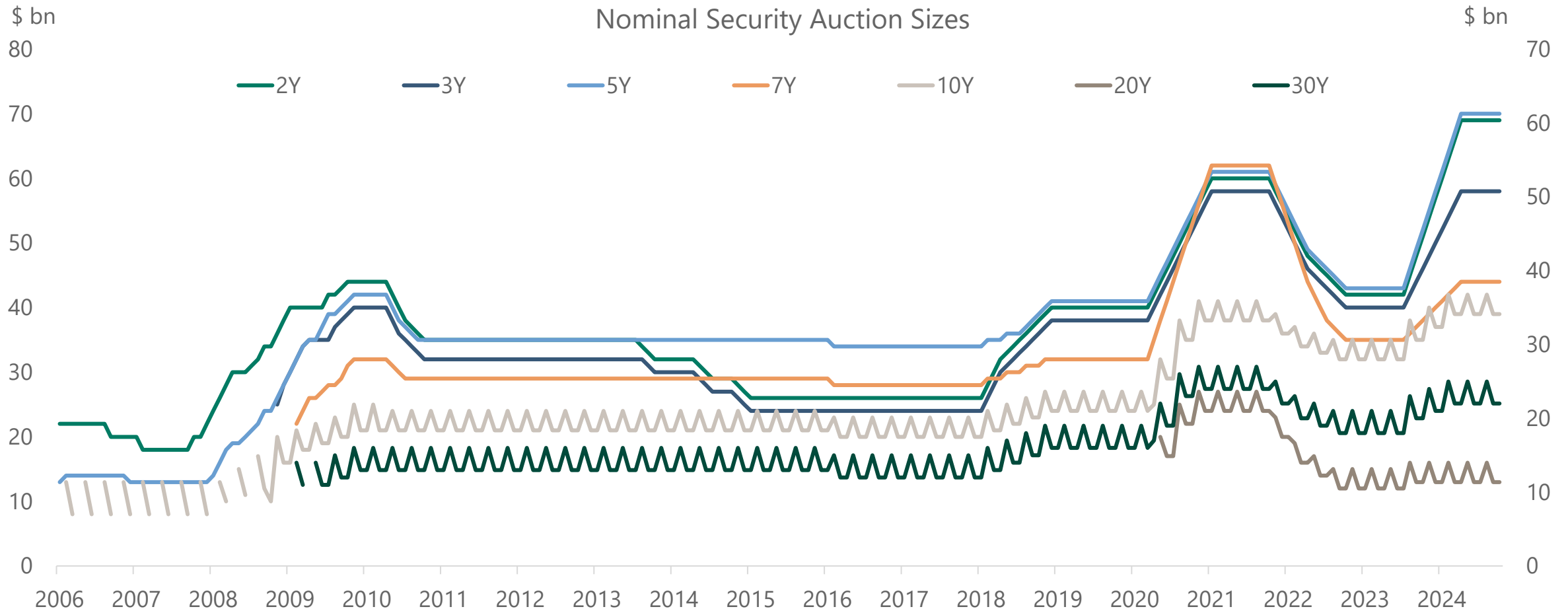


Who owns different countries' government debt?

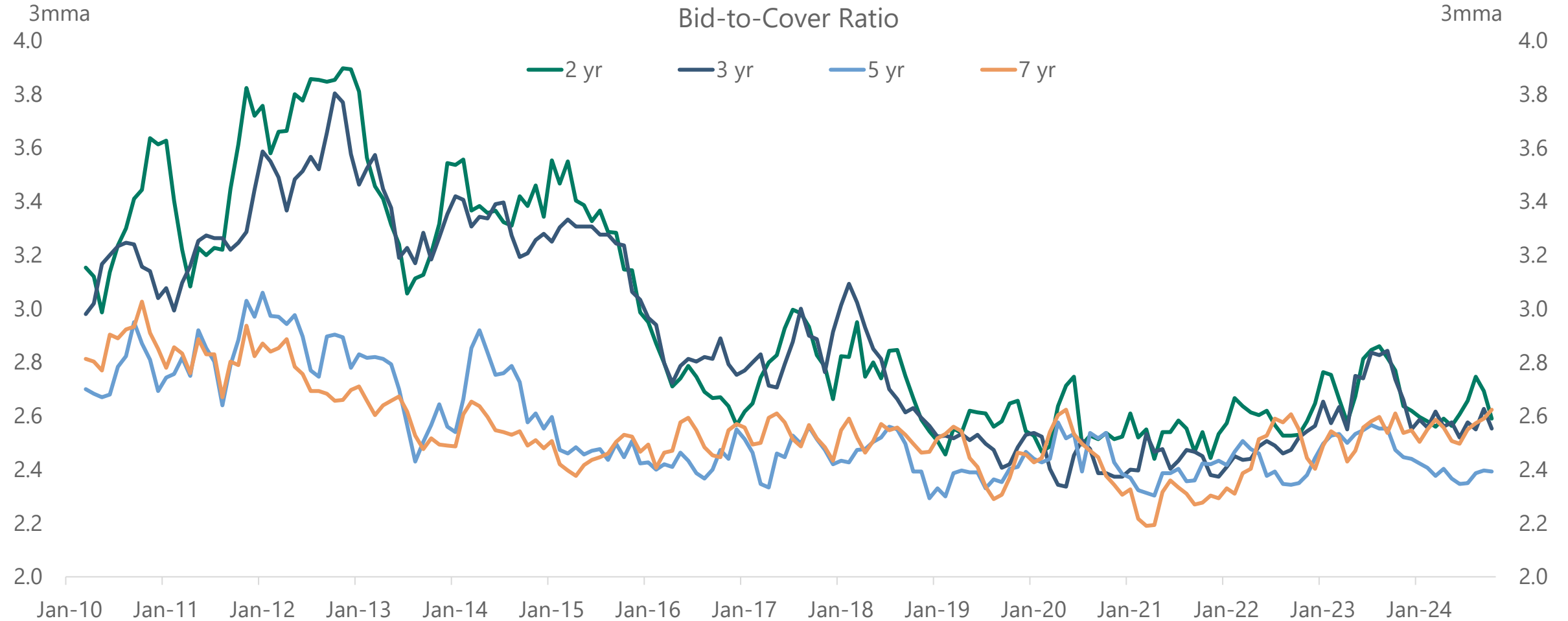


Treasury auction metrics

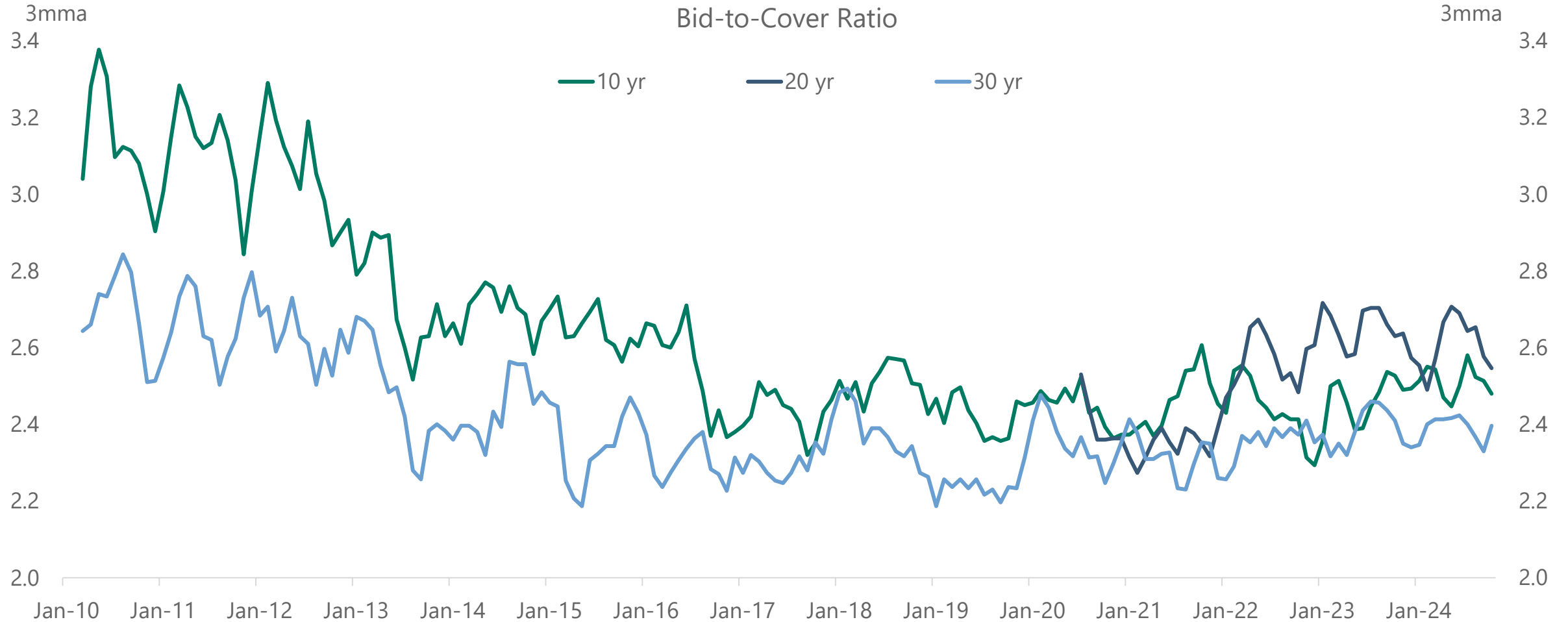
Auction sizes growing in 2025



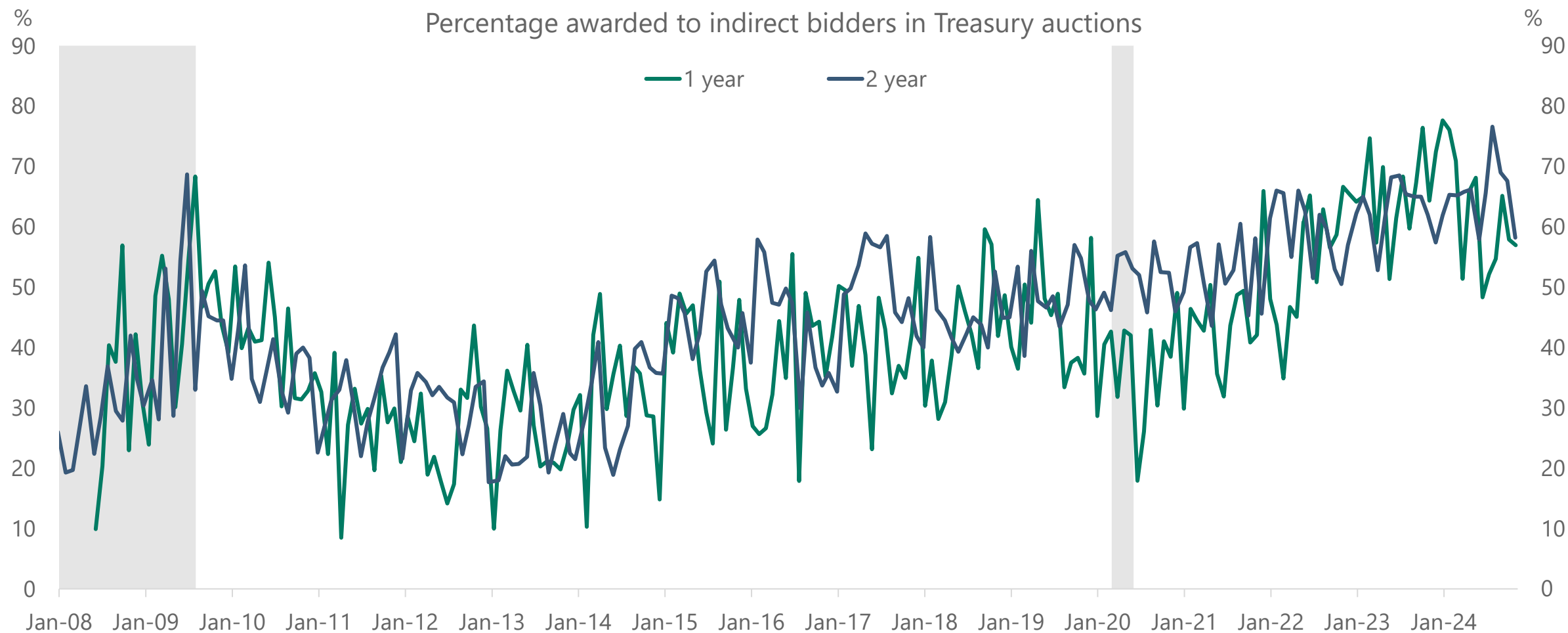
Rising Treasury supply increases downside risks to bid-to-cover ratios



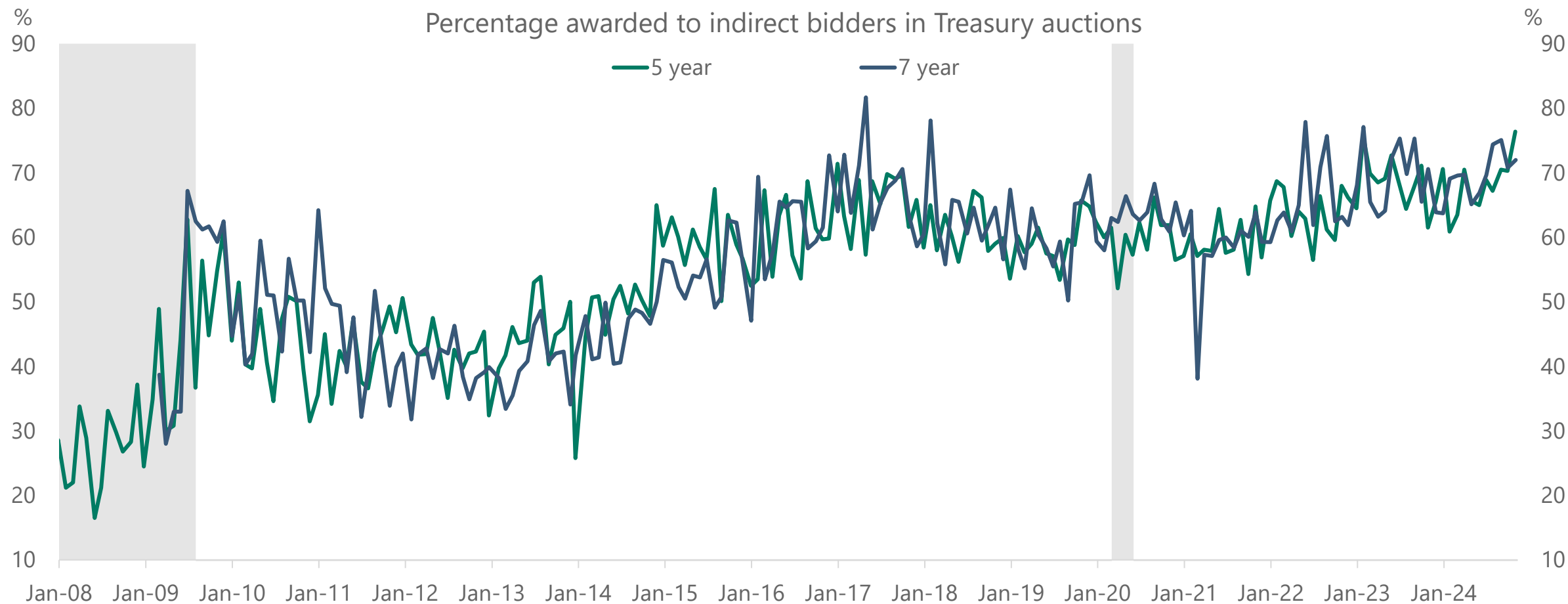
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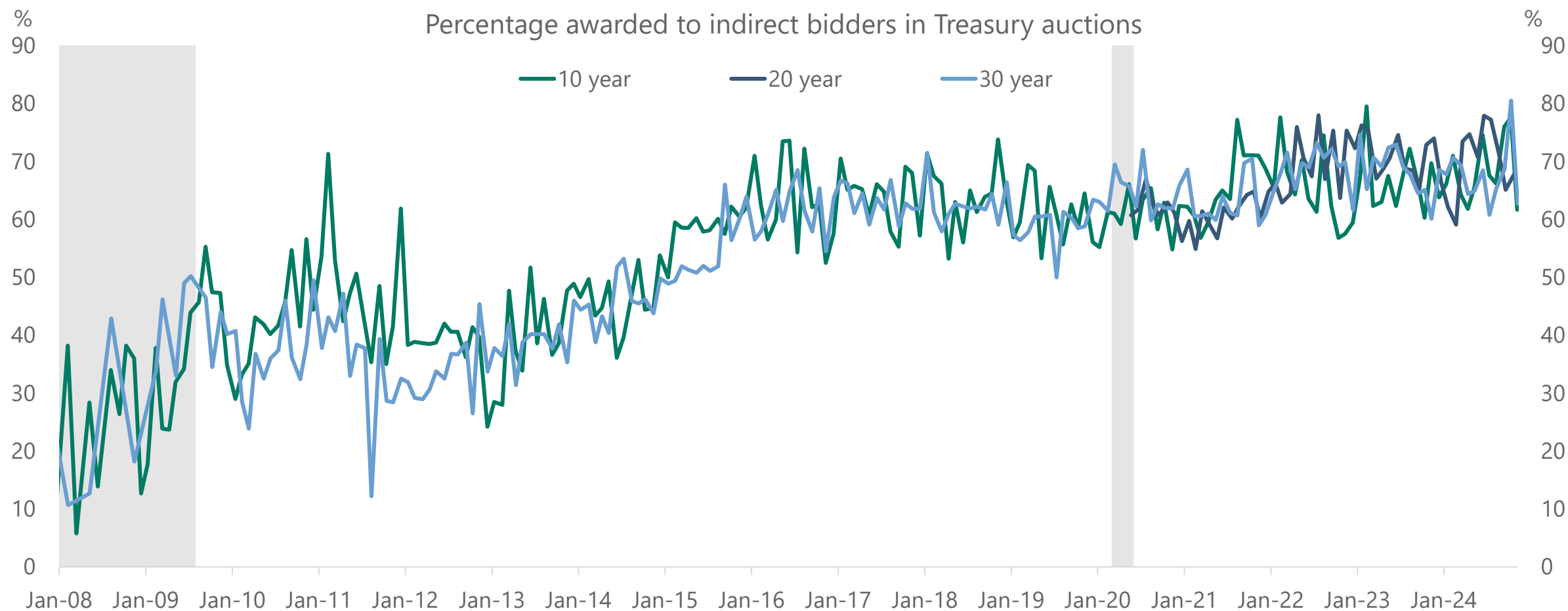
Indirect bidder share for 1- and 2-year notes



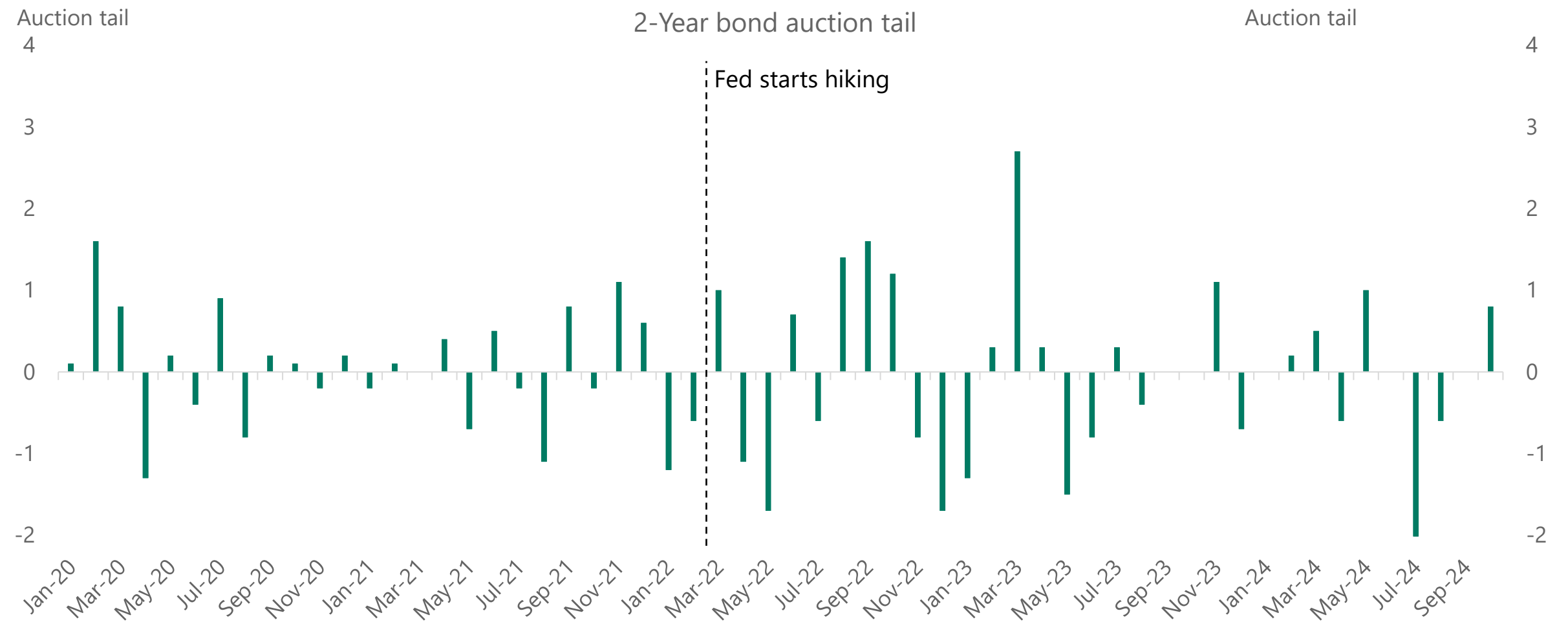
Indirect bidder share for 5- and 7-year notes



Indirect bidder share for 10- 20- and 30-year Treasuries

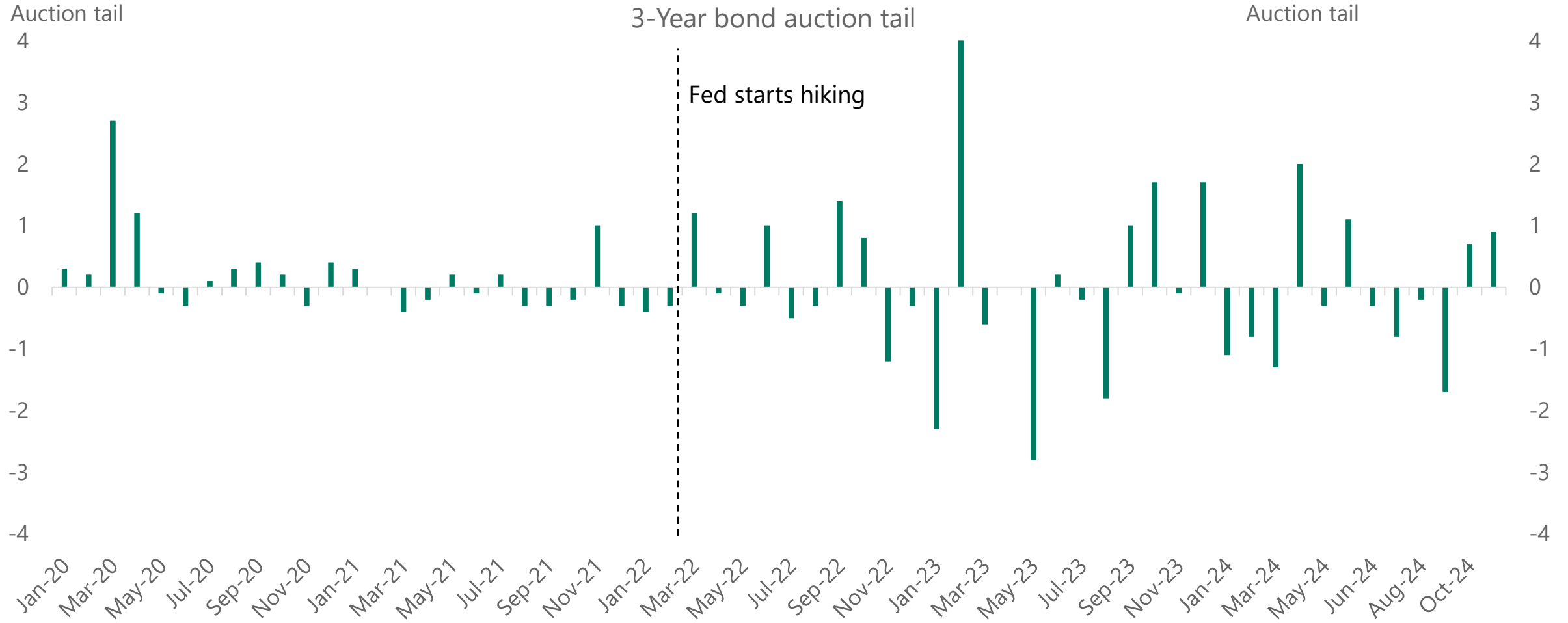


2-year bond auction tails

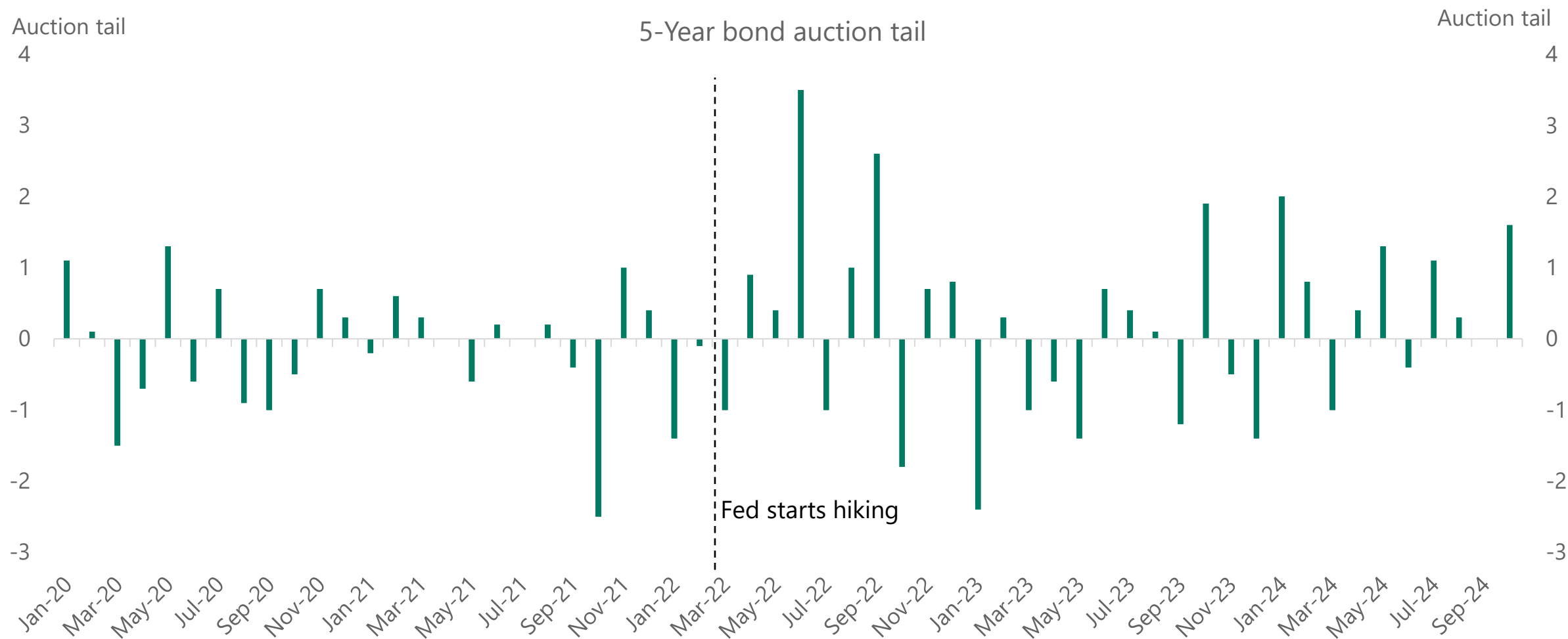


Source: U.S. Treasury Department, Bloomberg, Apollo Chief Economist. Note: Bloomberg ticker USB2YTL Index.

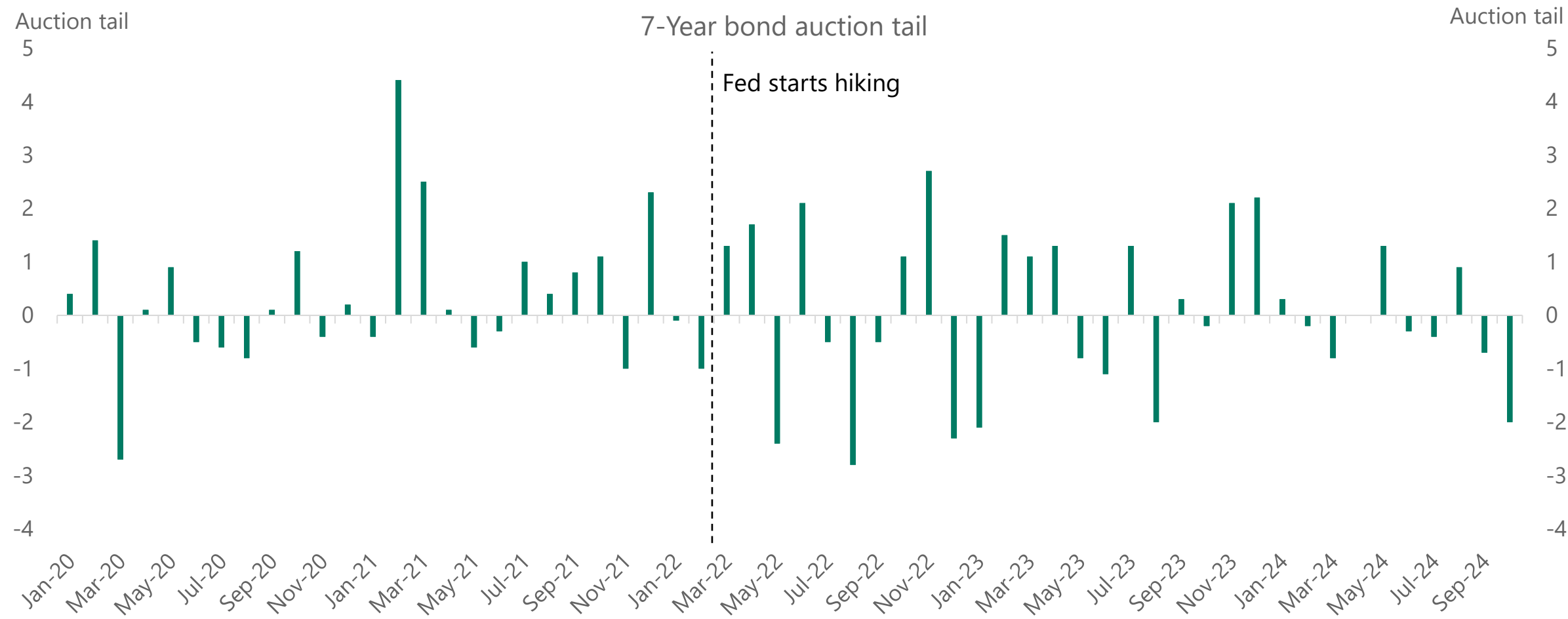
3-year bond auction tails



5-year bond auction tails

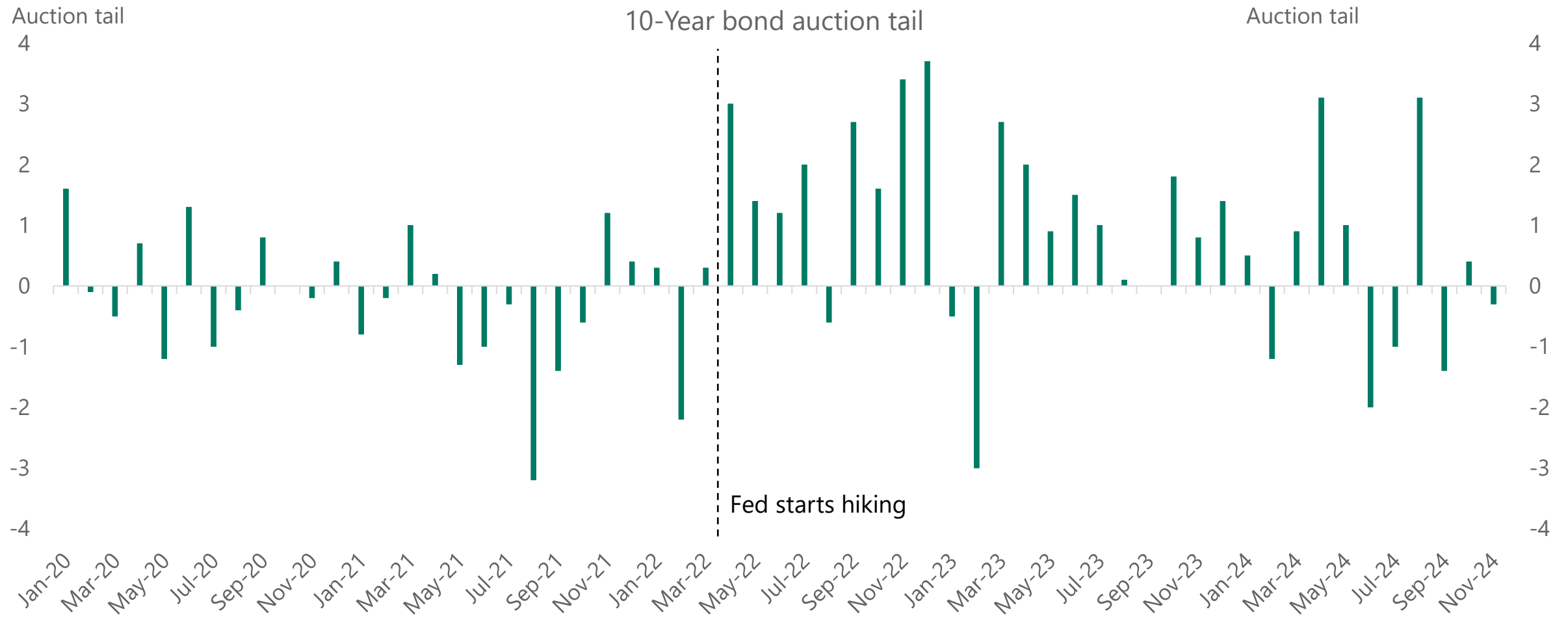


7-year bond auction tails

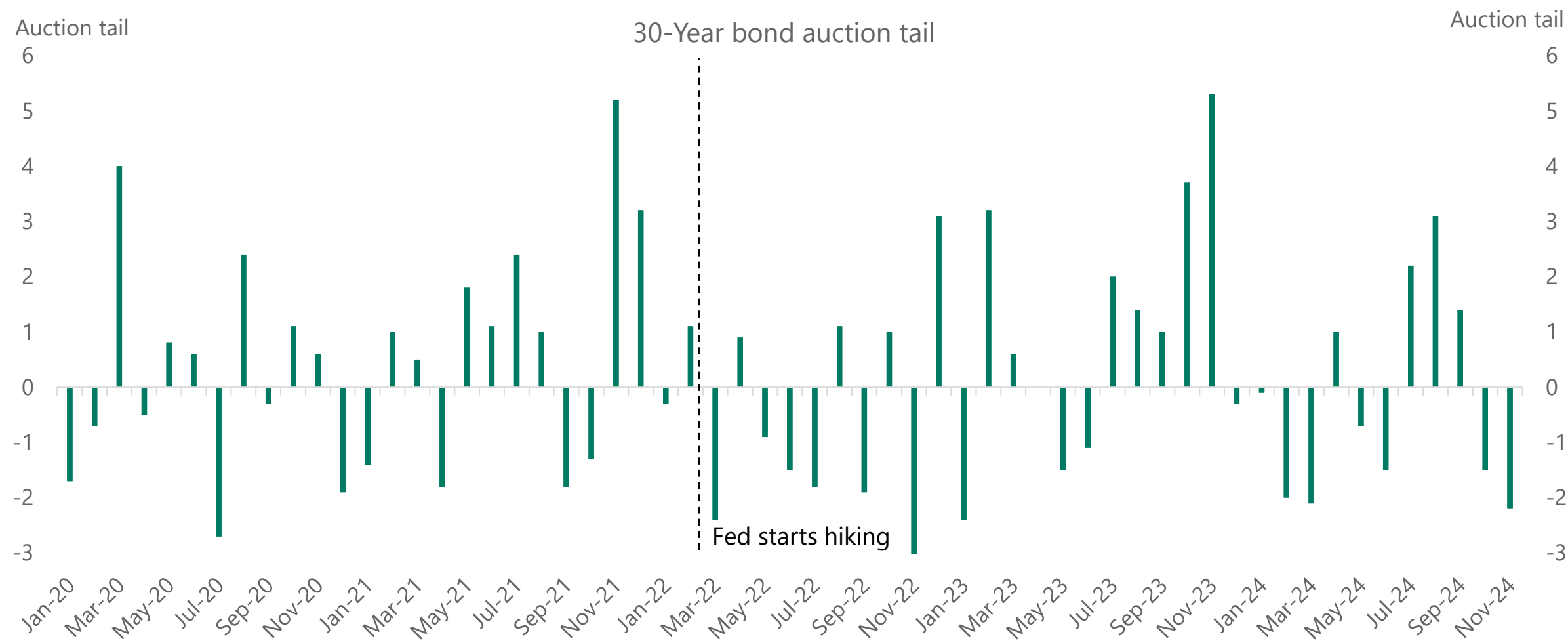


Source: U.S. Treasury Department, Bloomberg, Apollo Chief Economist. Note: Bloomberg ticker USB7YTL Index.

10-year bond auction tails

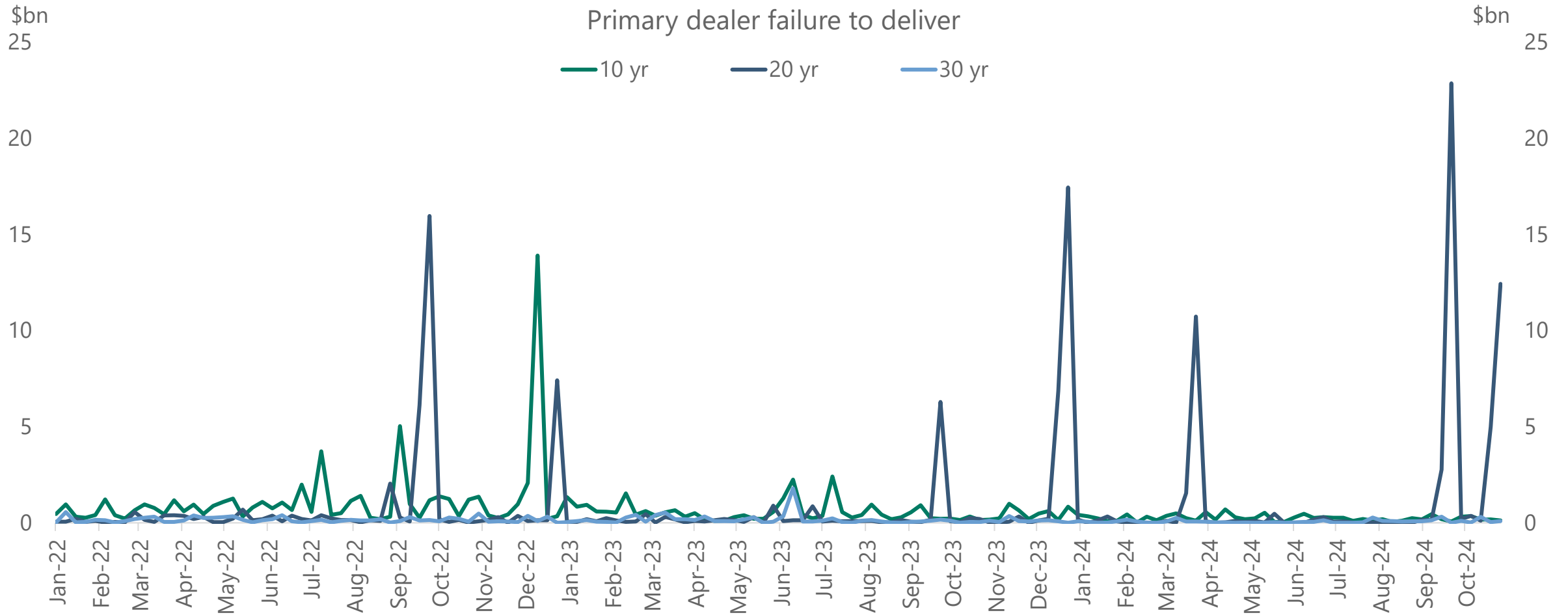


30-year bond auction tails



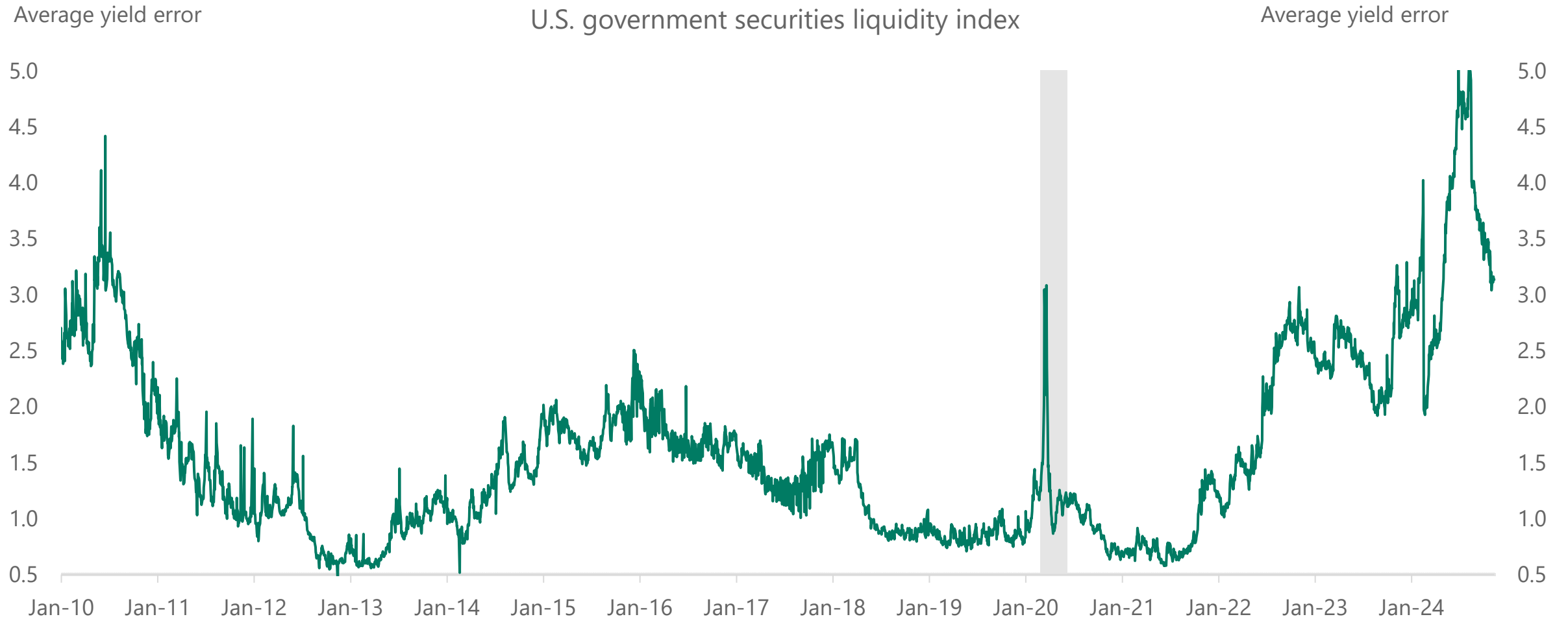
Source: U.S. Treasury Department, Bloomberg, Apollo Chief Economist. Note: Bloomberg ticker USBD30TL Index.

Primary dealer failure to deliver Treasuries



Note: Primary dealers have a limited time to deliver securities to settle any obligations to securities buyers. For a variety of reasons, dealers may be unable to meet these obligations—for instance, if they sell a security short that they do not own and are then unable to obtain the security for delivery. The unmet obligation to a buyer is recorded as a failure to deliver. Source: OFR, FRBNY, Apollo Chief Economist

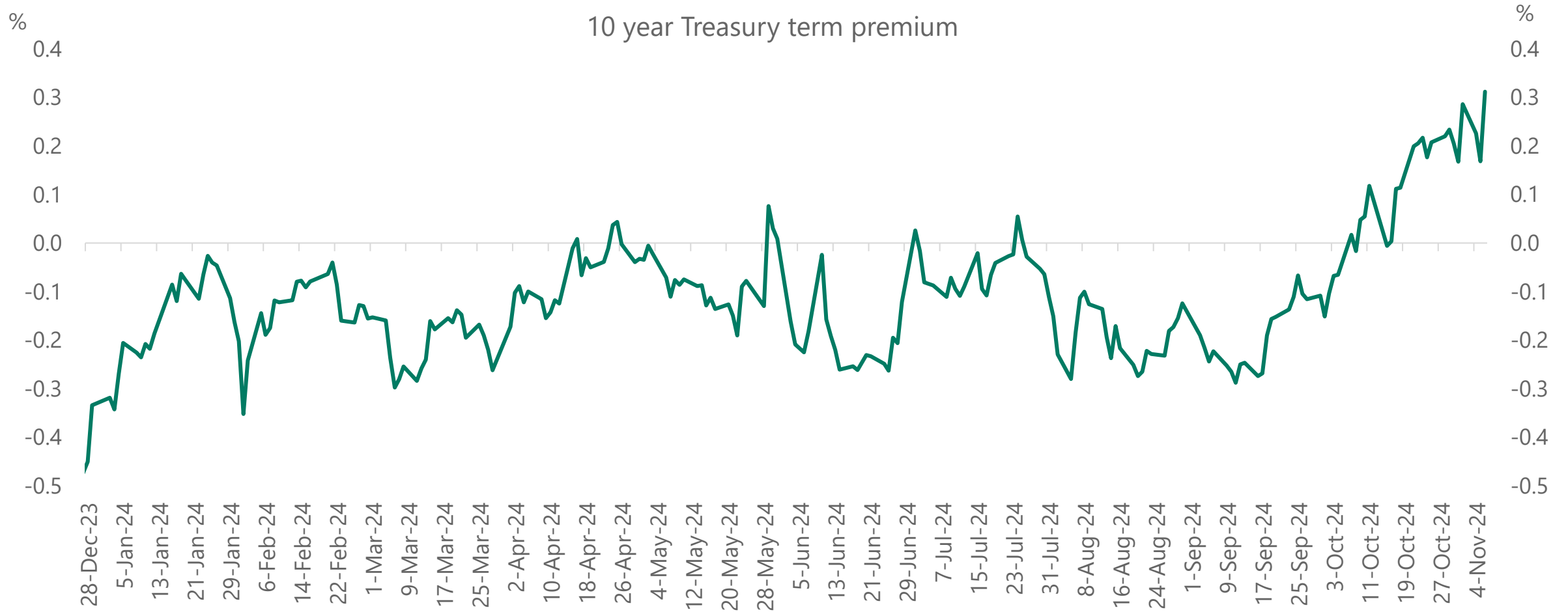
Liquidity in the Treasury market



Note: The index displays the average yield error across the universe of government notes and bonds with remaining maturity 1-year or greater, based off the intra-day Bloomberg relative value curve fitter. When liquidity conditions are favorable the average yield errors are small as any dislocations from fair values are normalized within a short time frame. Average yield error is defined as an aggregate measure for dislocations in Treasury securities across the curve. Source: Bloomberg, Apollo Chief Economist.

The term premium

10-year Treasury term premium rising

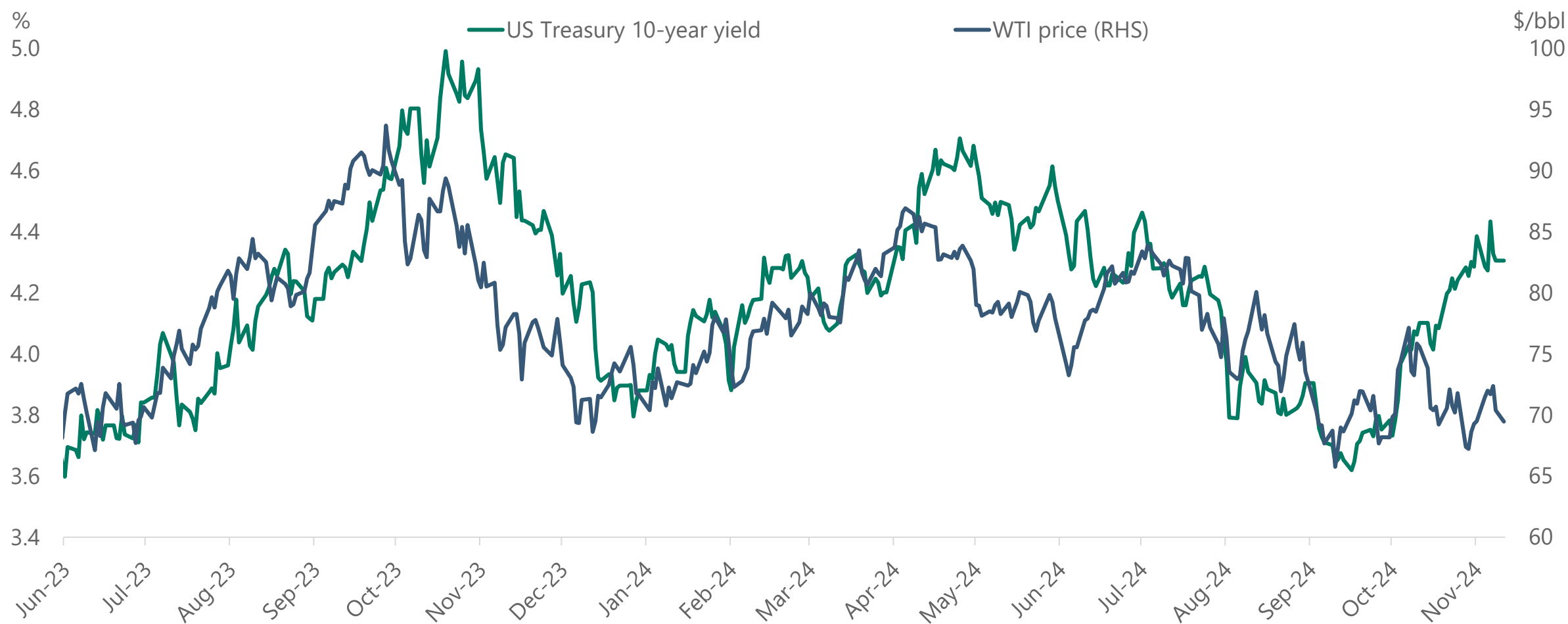


Source: Bloomberg, Apollo Chief Economist. Note: New York Fed economists Tobias Adrian, Richard Crump, and Emanuel Moench (or 'ACM') present Treasury term premia estimates for maturities from one to ten years from 1961 to the present. ACM further estimate fitted yields and the expected average short-term rates for the same set of maturities. The analysis is based on a five-factor, no-arbitrage term structure model.

Term premium in a longer perspective

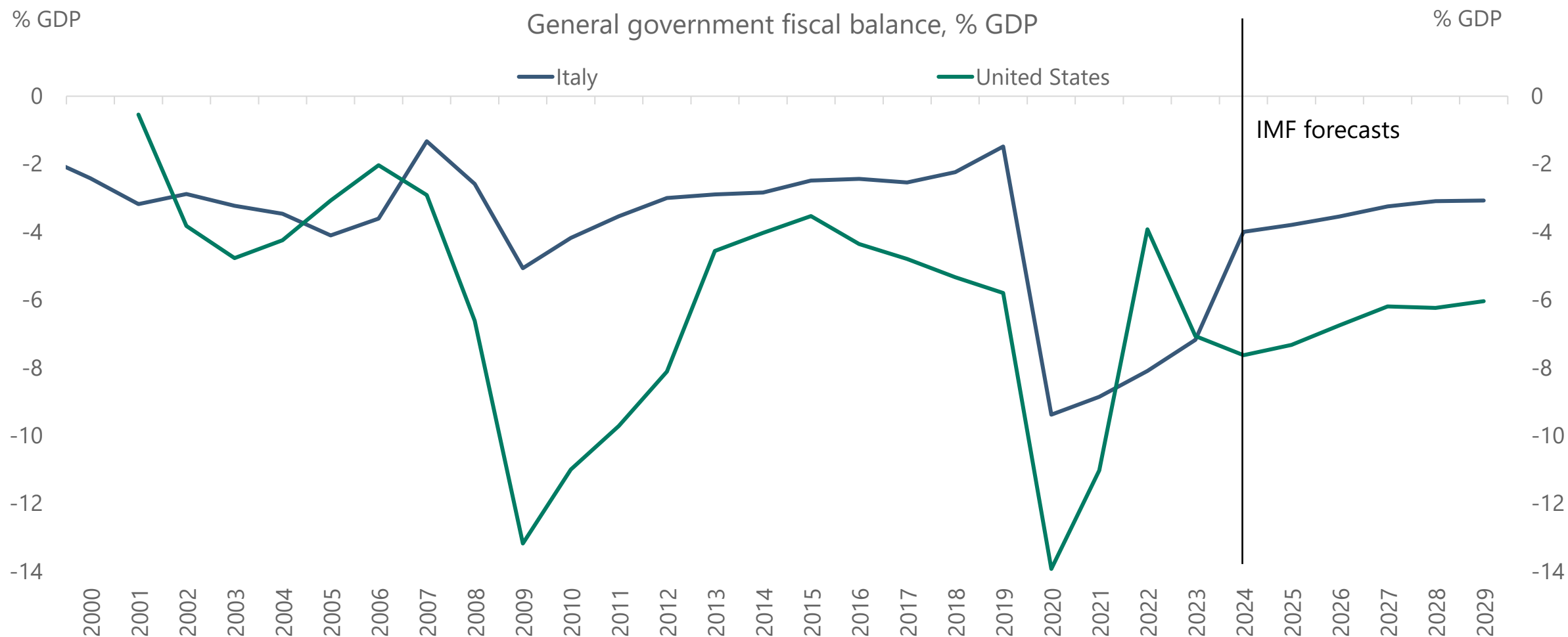


10-year Treasury yield decoupling from oil prices recently

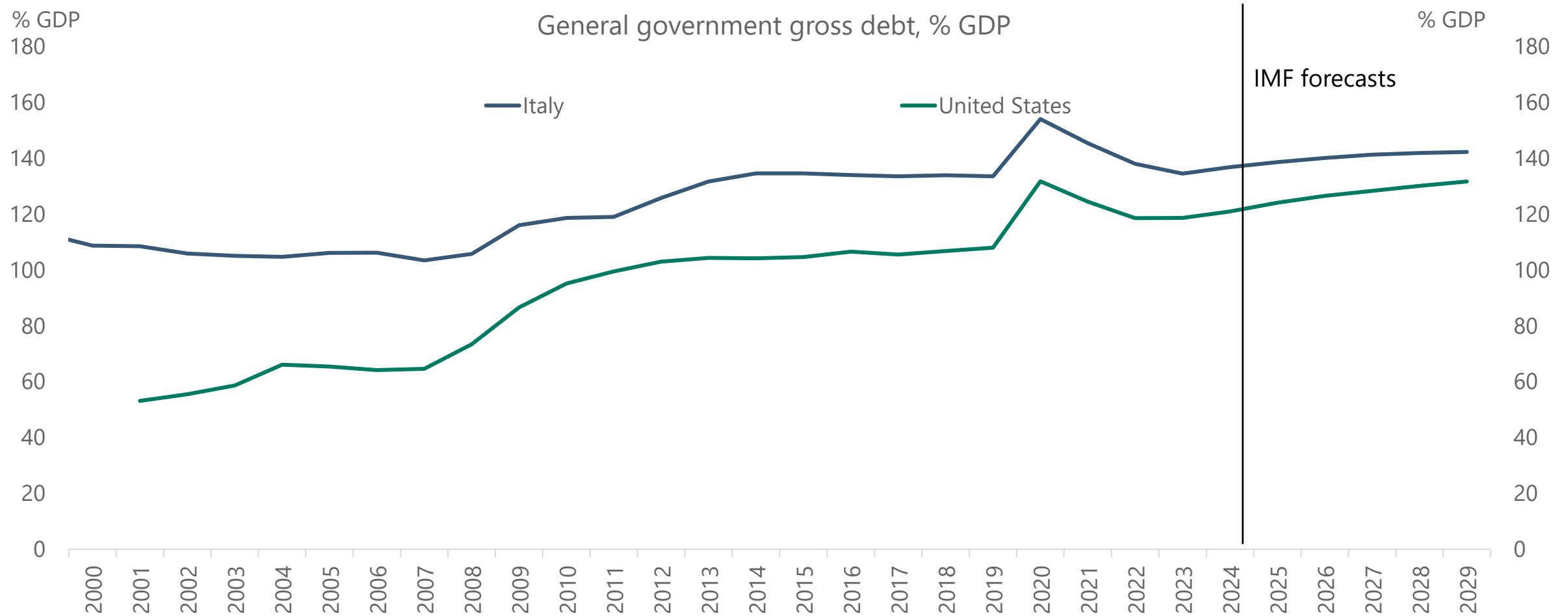


Comparison with Italy

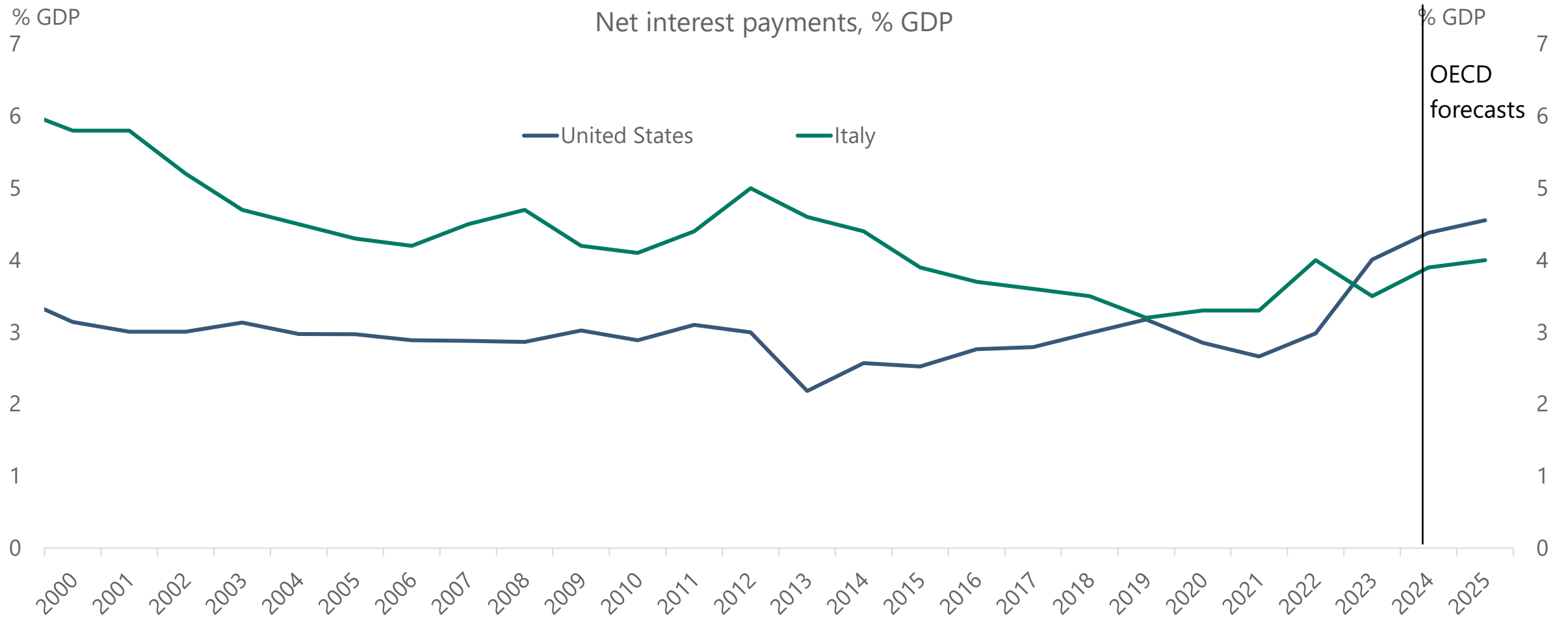
Comparing budget deficits in the US and Italy



Comparing government debt levels in the US and Italy



Comparing net interest payments in the US and Italy



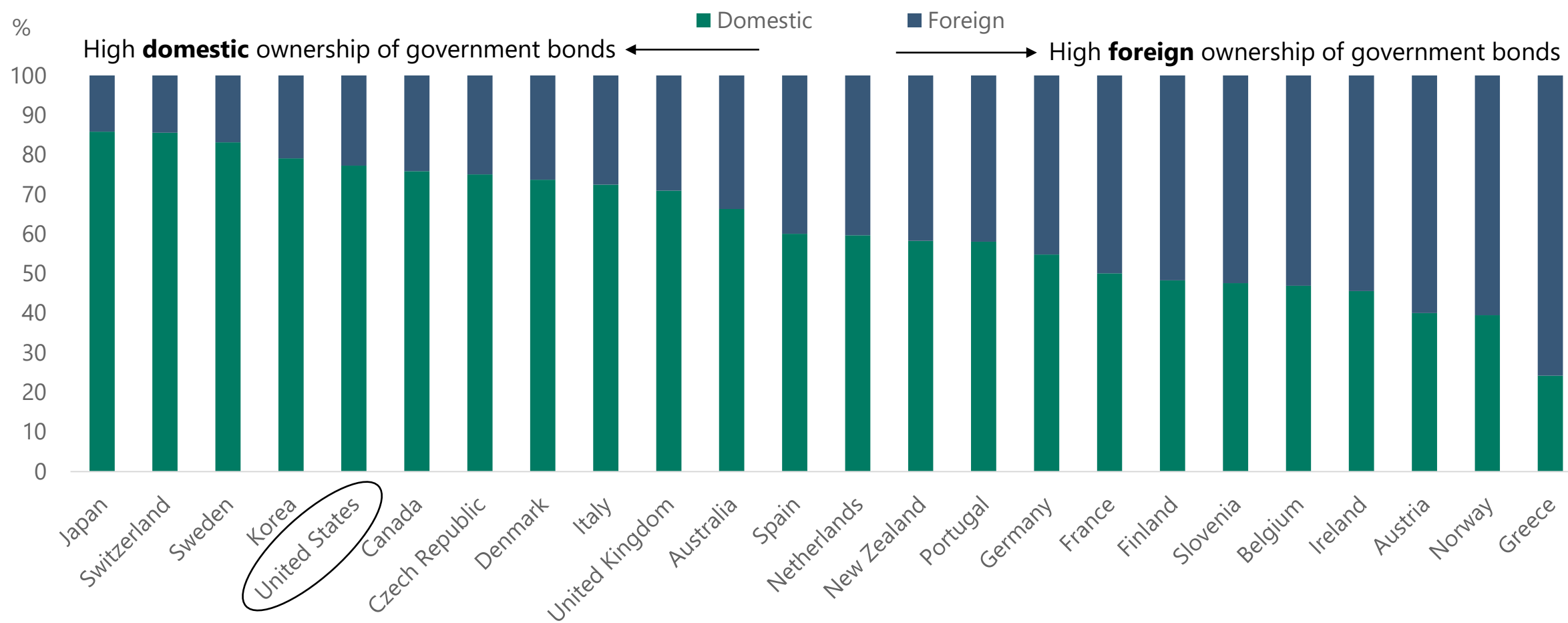
The dollar

Characteristics of a reserve currency

- The size of the domestic economy,
- The importance of the economy in international trade,
- The size, depth, and openness of financial markets,
- The convertibility of the currency,
- The use of the currency as a currency peg, and
- Domestic macroeconomic policies

Sanctions have recently played a role.

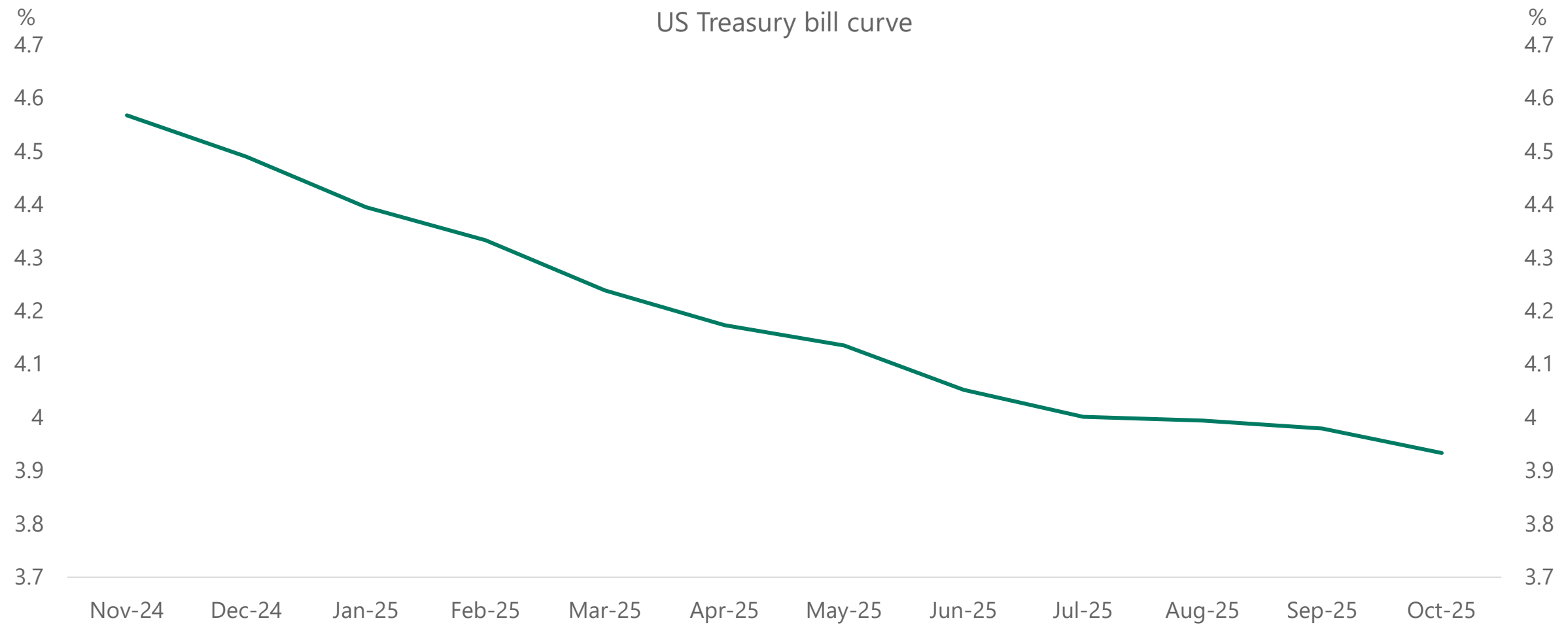
Switzerland, Japan, Korea, and US have high **domestic** ownership of government bonds



Gold reserves rising. Sanctions likely playing a role.

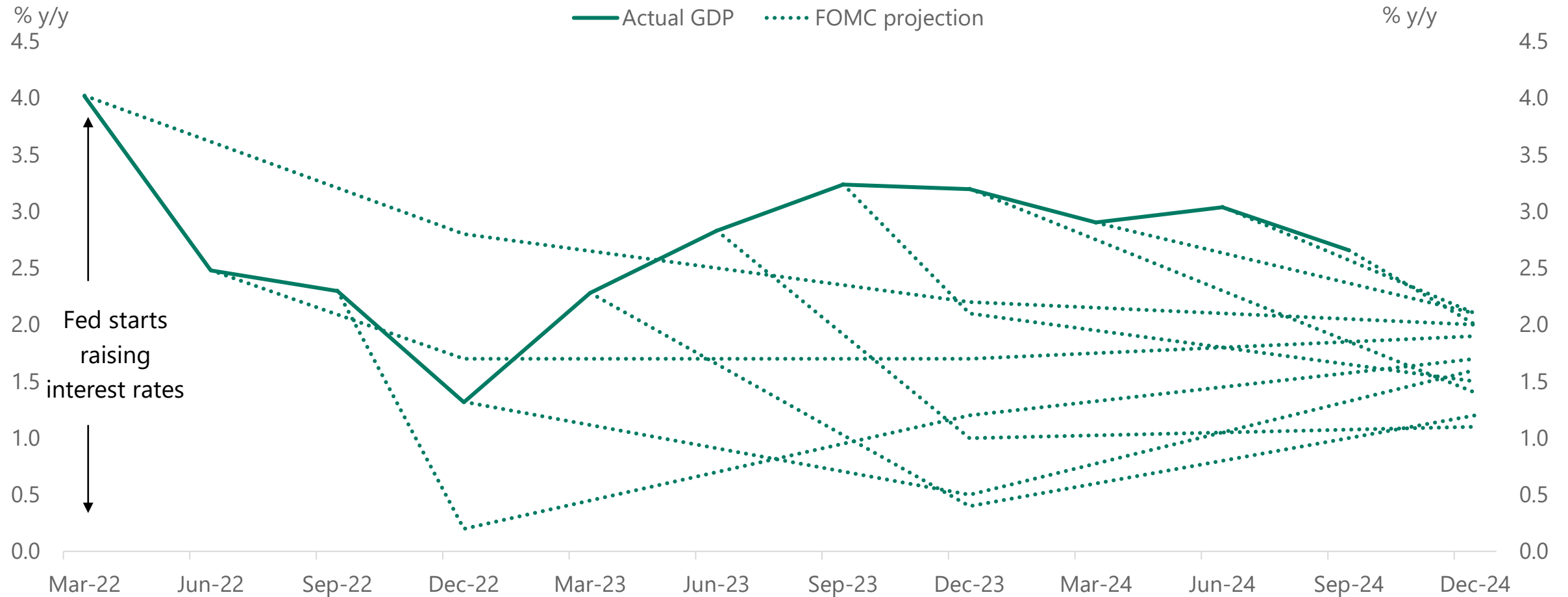


Debt ceiling will be reinstated on January 1, 2025

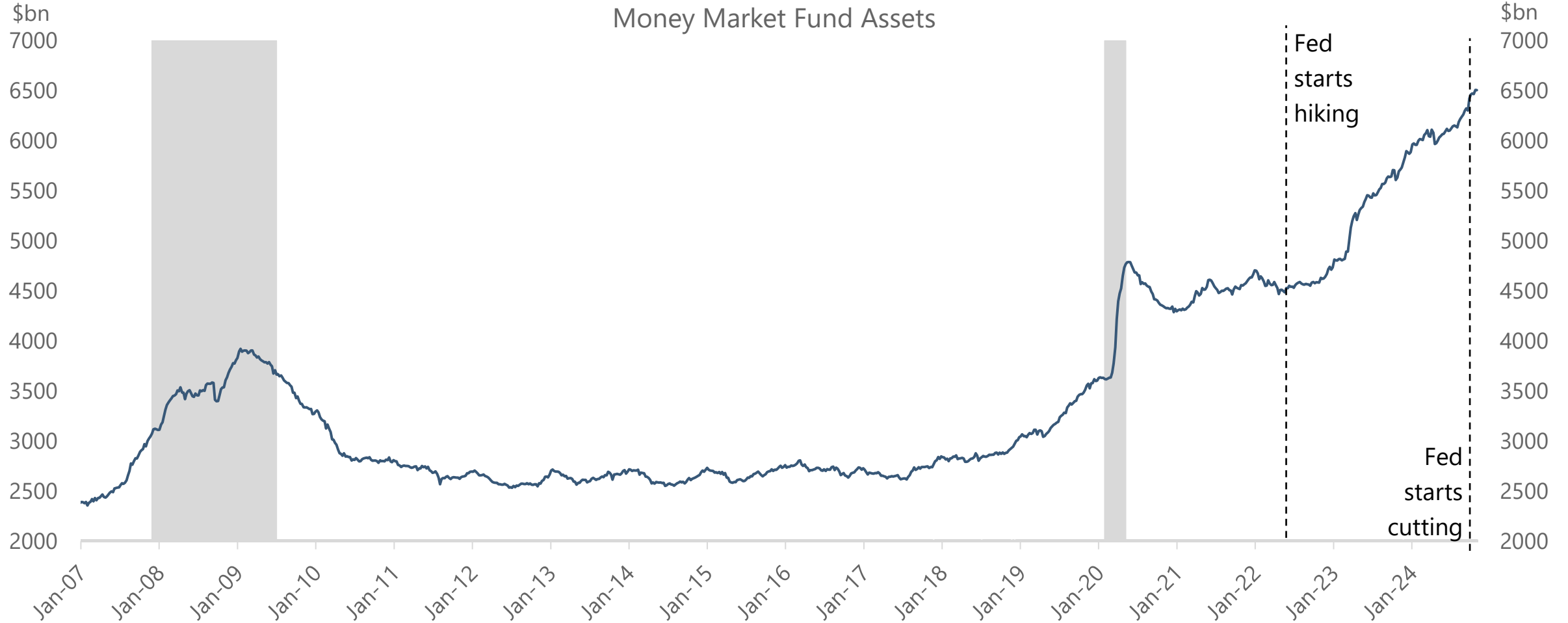


Source: Bloomberg, Apollo Chief Economist.

The FOMC has constantly expected the economy to slow down.
But it still hasn't happened.



What will happen to money market fund assets as the Fed cuts interest rates?



Conclusion

**US fiscal policy is on an unsustainable path.
How could this become an issue for markets?**

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Bottom line: So far, so good.

Unlikely we will get a debt crisis. If we do get one, will the Fed do QE?

More likely is higher long-term interest rates and a steepening of the yield curve.



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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.

10 Facts about the US Treasury market

1. According to the CBO, government debt levels are going to rise from 100% to 200% of GDP
2. Deficits are projected to be more than \$1trn every year for the next 10 years
3. \$9trn of government debt will mature over the coming 12 months
4. Since the Fed started raising rates households, pension, and insurance have been buying more Treasuries
5. China has lowered its holdings of Treasuries from \$1.2trn in 2015 to \$800bn today
6. A rising share of debt outstanding is T-bills, currently 22%
7. The weighted average maturity of debt outstanding is declining
8. Treasury auction sizes in 2024 have increased on average 27% across the yield curve
9. Debt servicing costs are currently 13% of total government outlays
10. Interest payments have increased from \$1bn per day before the pandemic to currently \$3bn per day