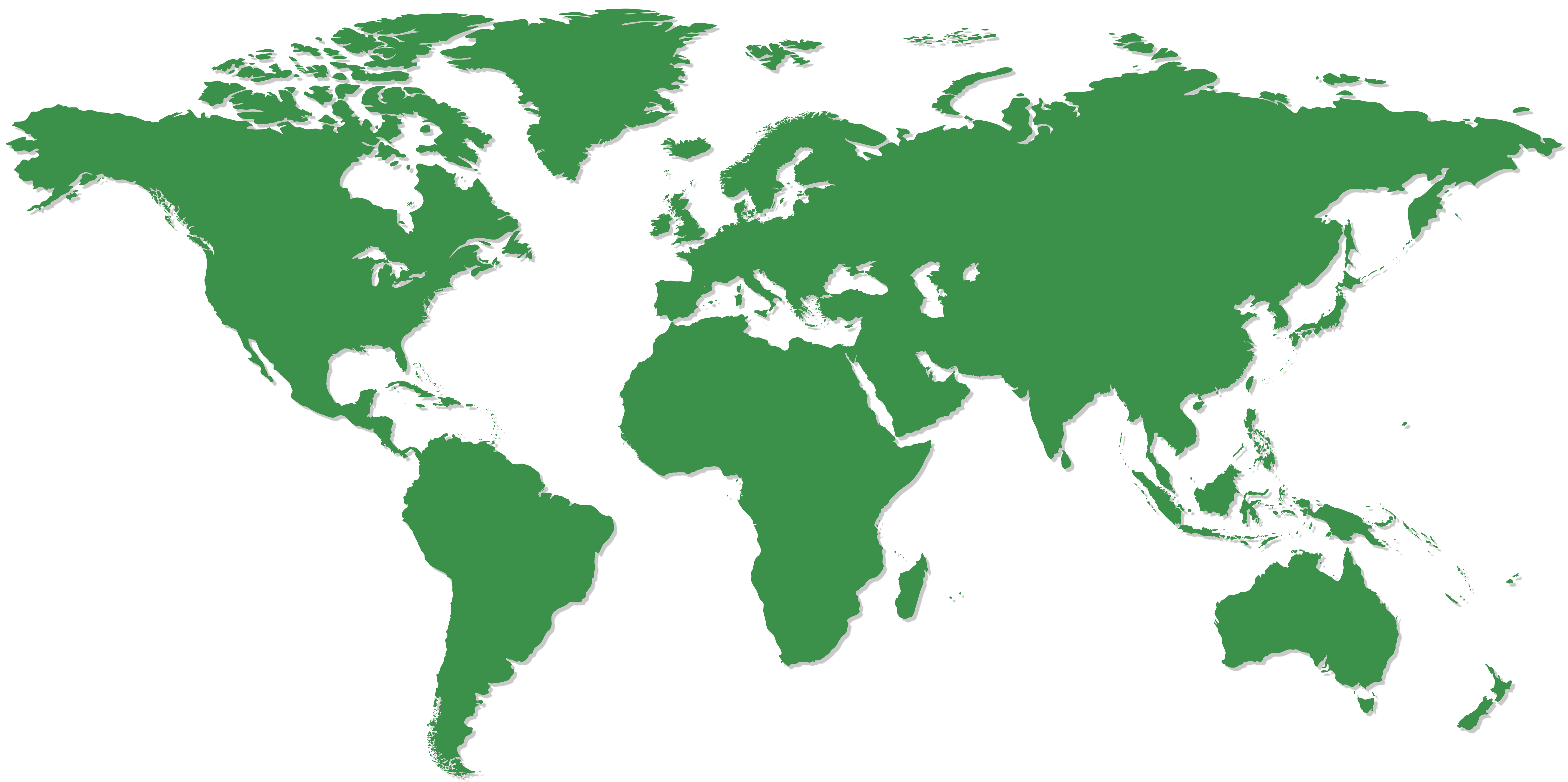
International Monetary Fund

16 November 2023



Global Financial Stability Outlook

SUERF / ESM High-level workshop

Tobias Adrian

Financial Counselor and Director

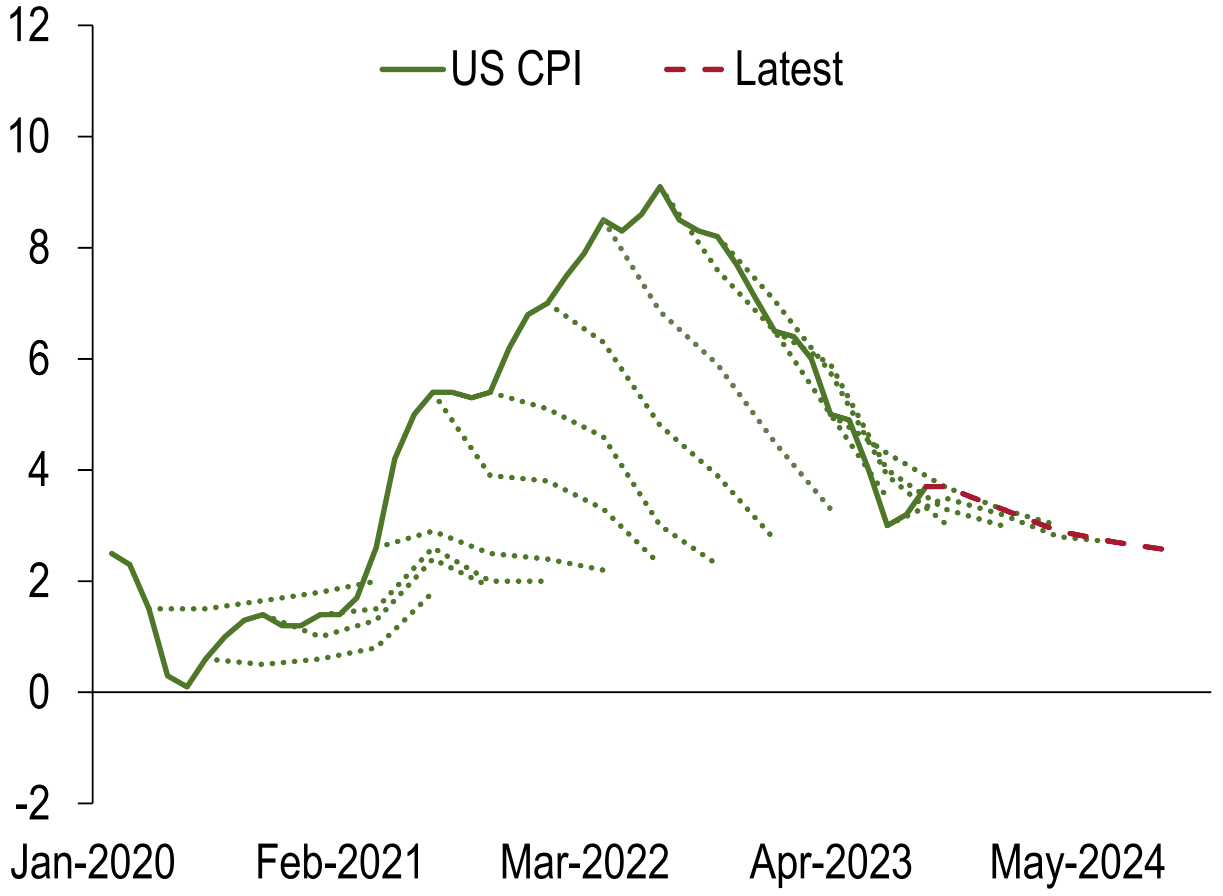
Monetary and Capital Markets Department

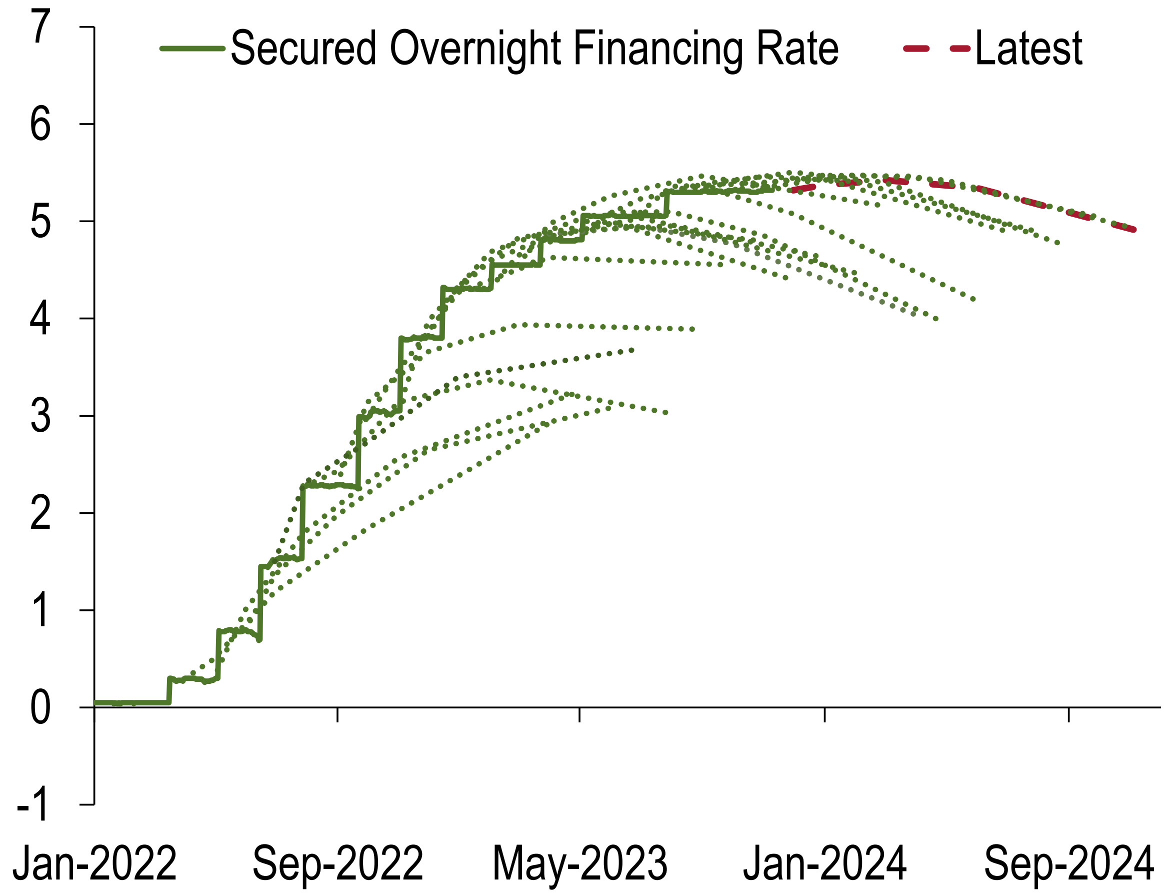
Soft Landing or Abrupt Awakening

- Financial stability risks remain elevated
- Acute stress in banking has subsided but the weak tail of banks is still large
- Despite the declines in equity prices since September due to rising long-term yields, there still is a risk of further re-pricing
- Large emerging markets remain resilient but frontiers and LICs continue to face challenges
- The global credit cycle has started to turn as borrowers' debt repayment capacity diminishes

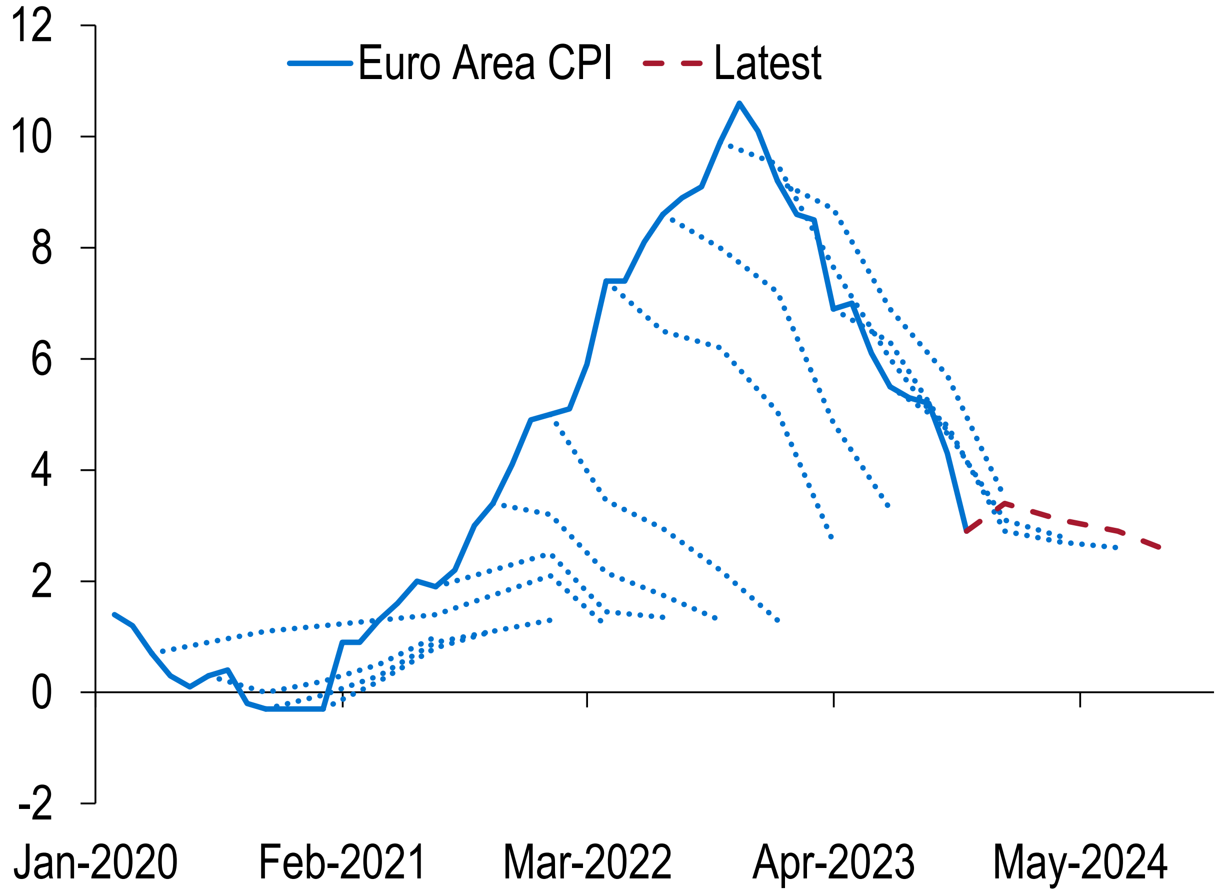
Markets remain optimistic about inflation in Advanced Economies

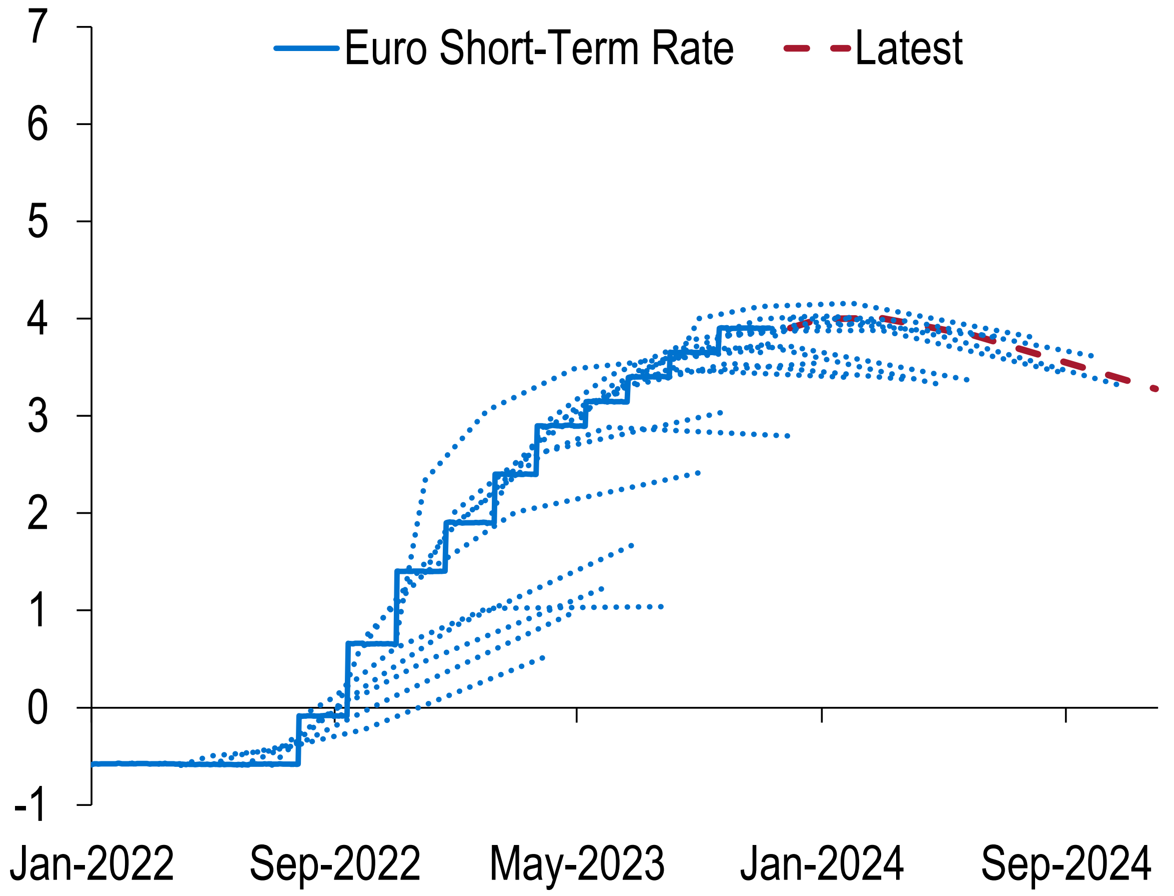
US Inflation and Policy Rate Expectations
(Percent)



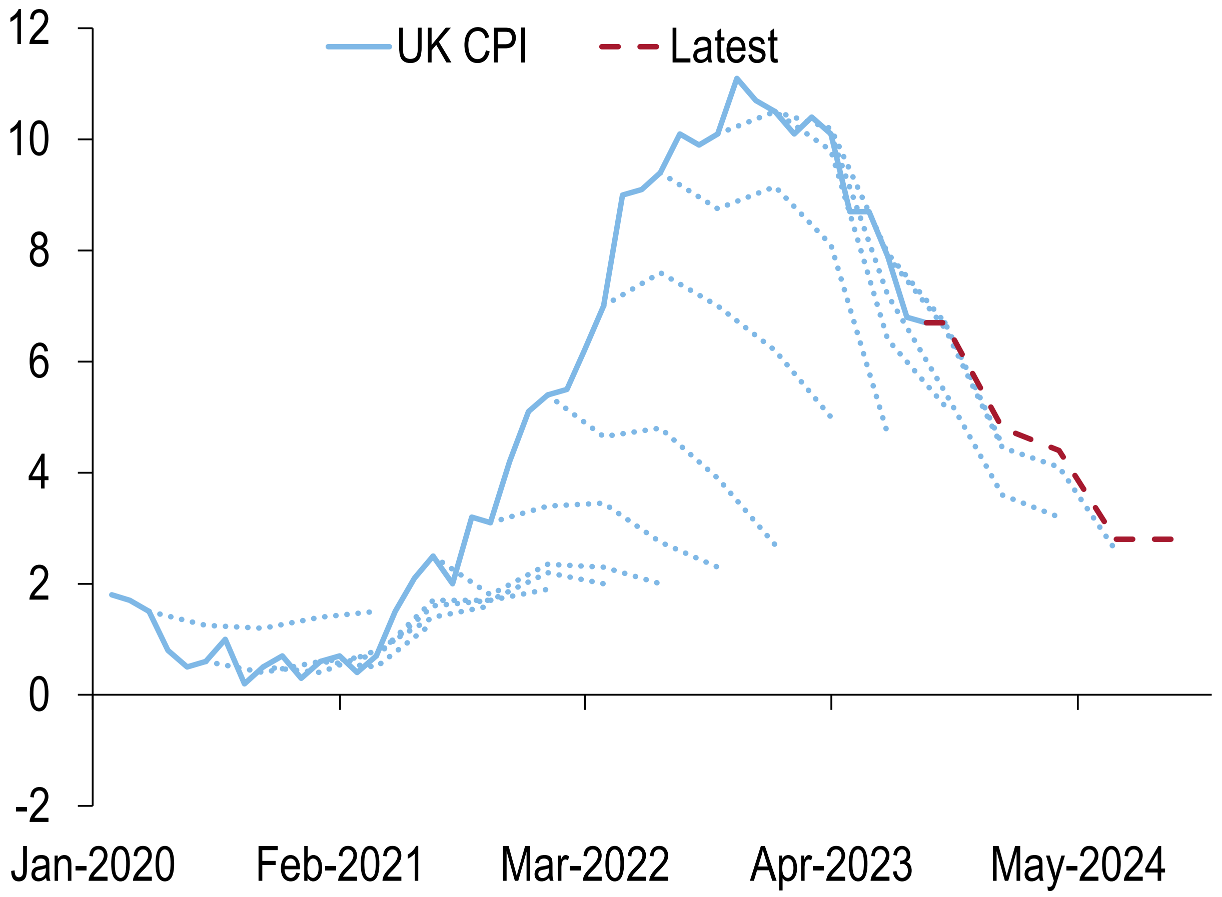


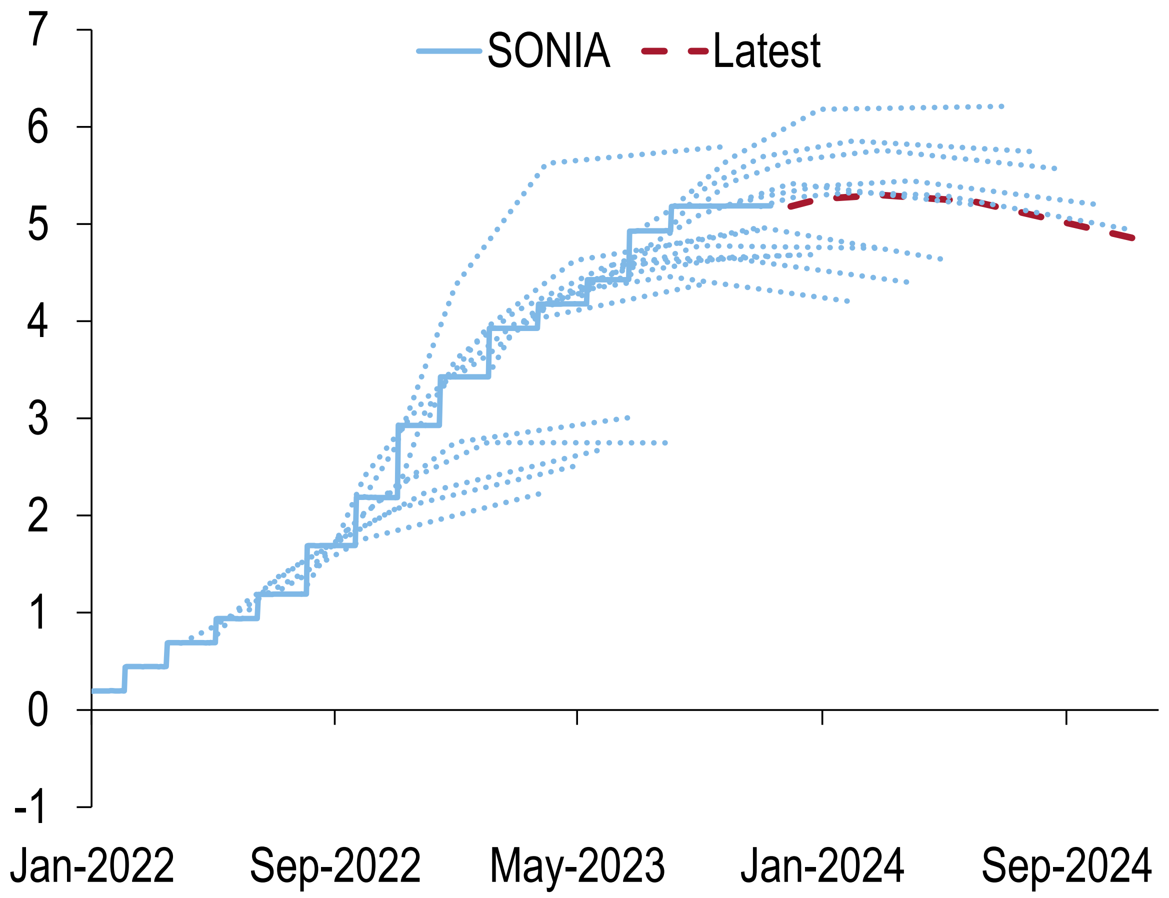
Euro Area Inflation and Policy Rate Expectations
(Percent)



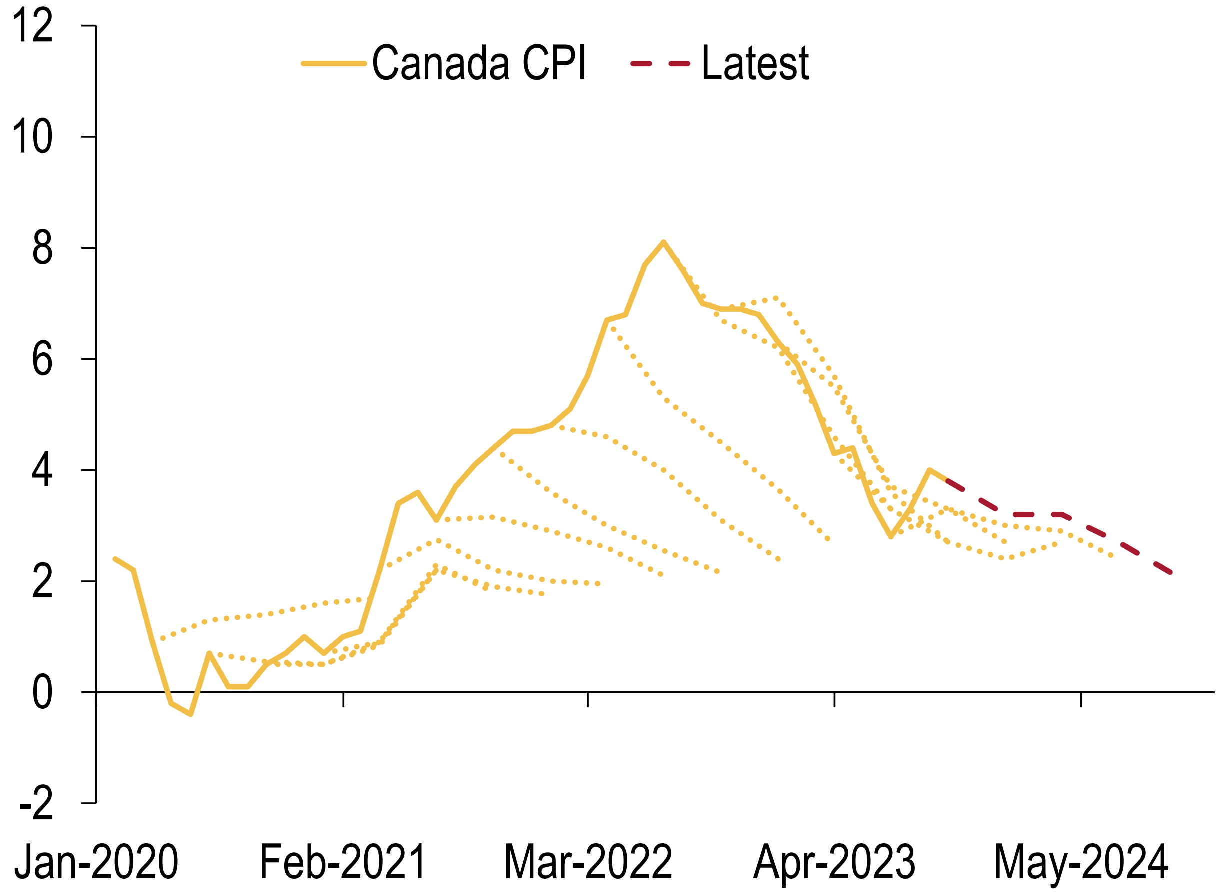


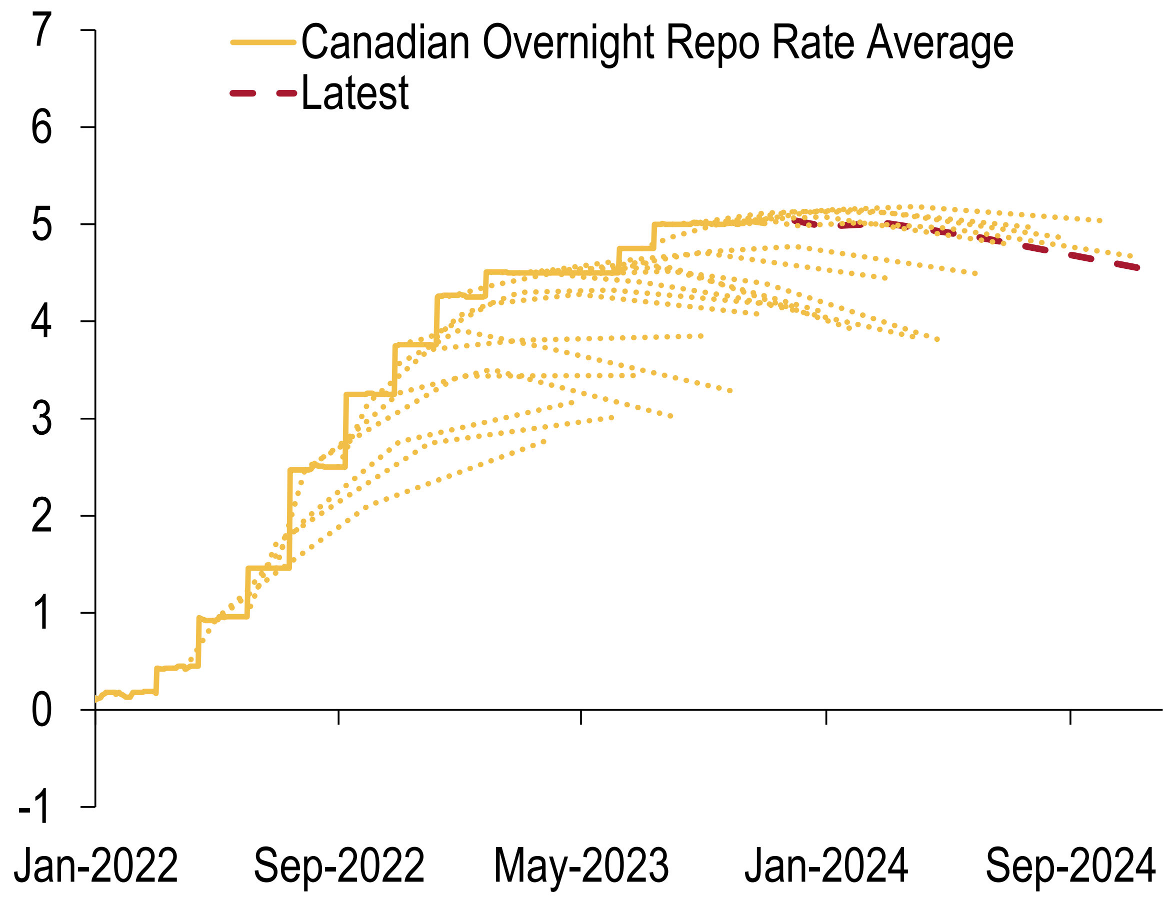
UK Inflation and Policy Rate Expectations
(Percent)





Canada Inflation and Policy Rate Expectations
(Percent)

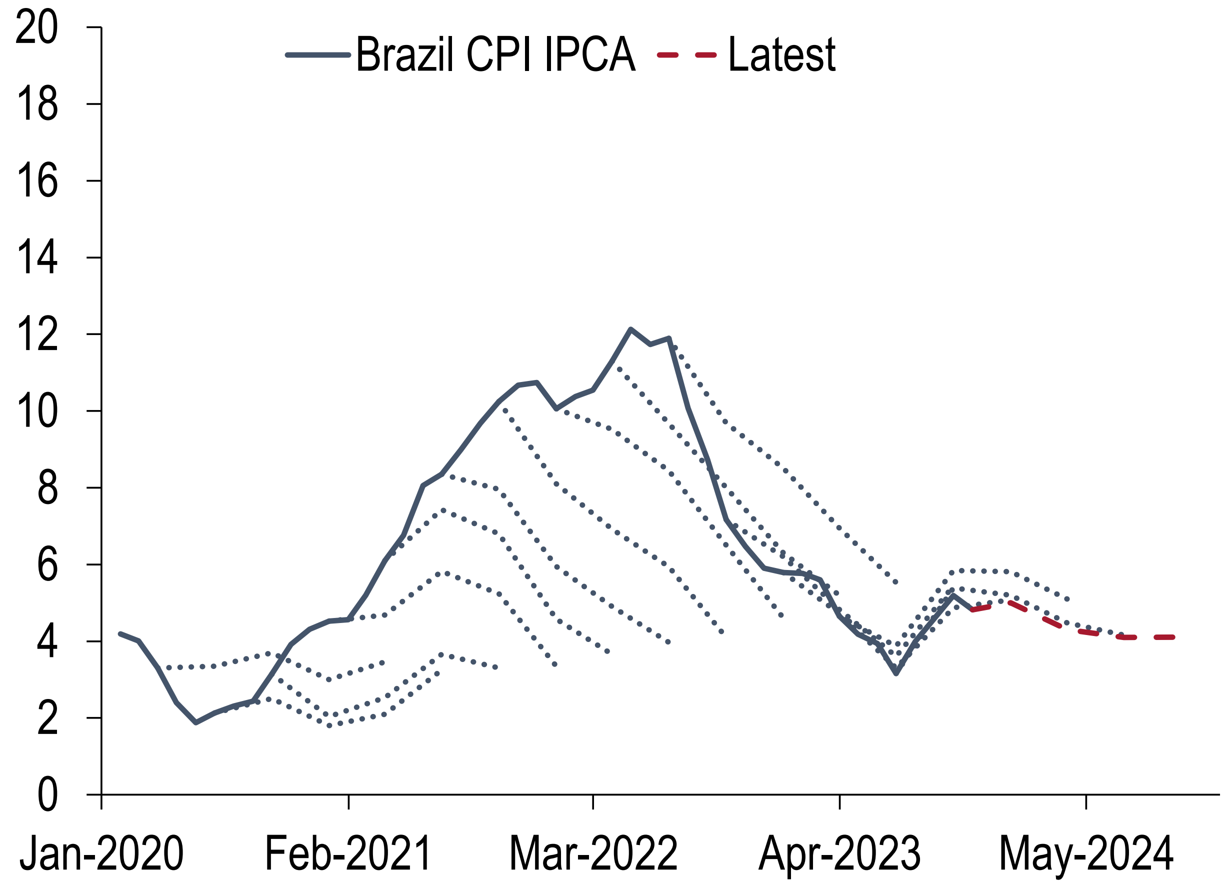


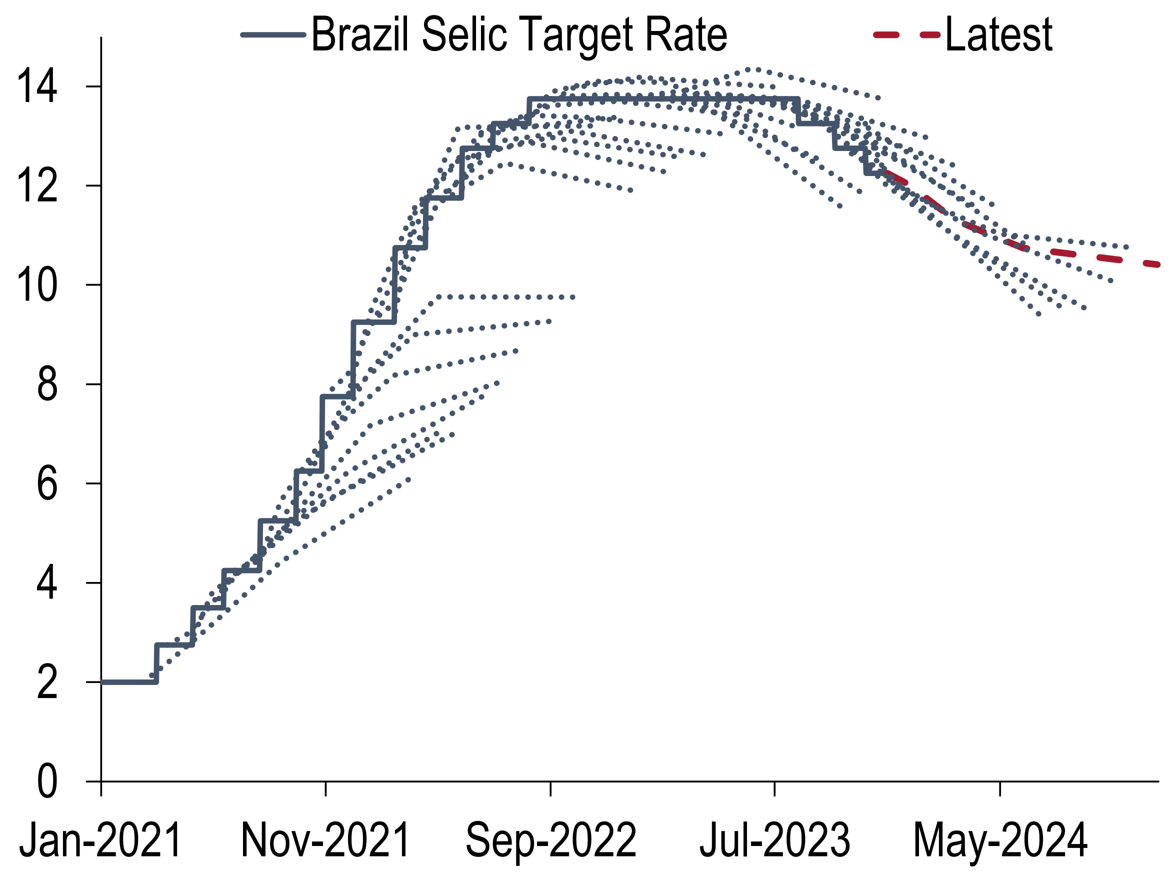


Note: Dotted lines indicate economists' consensus expectations for the inflation charts and expectations of the future path of interest rates in the policy rate charts.

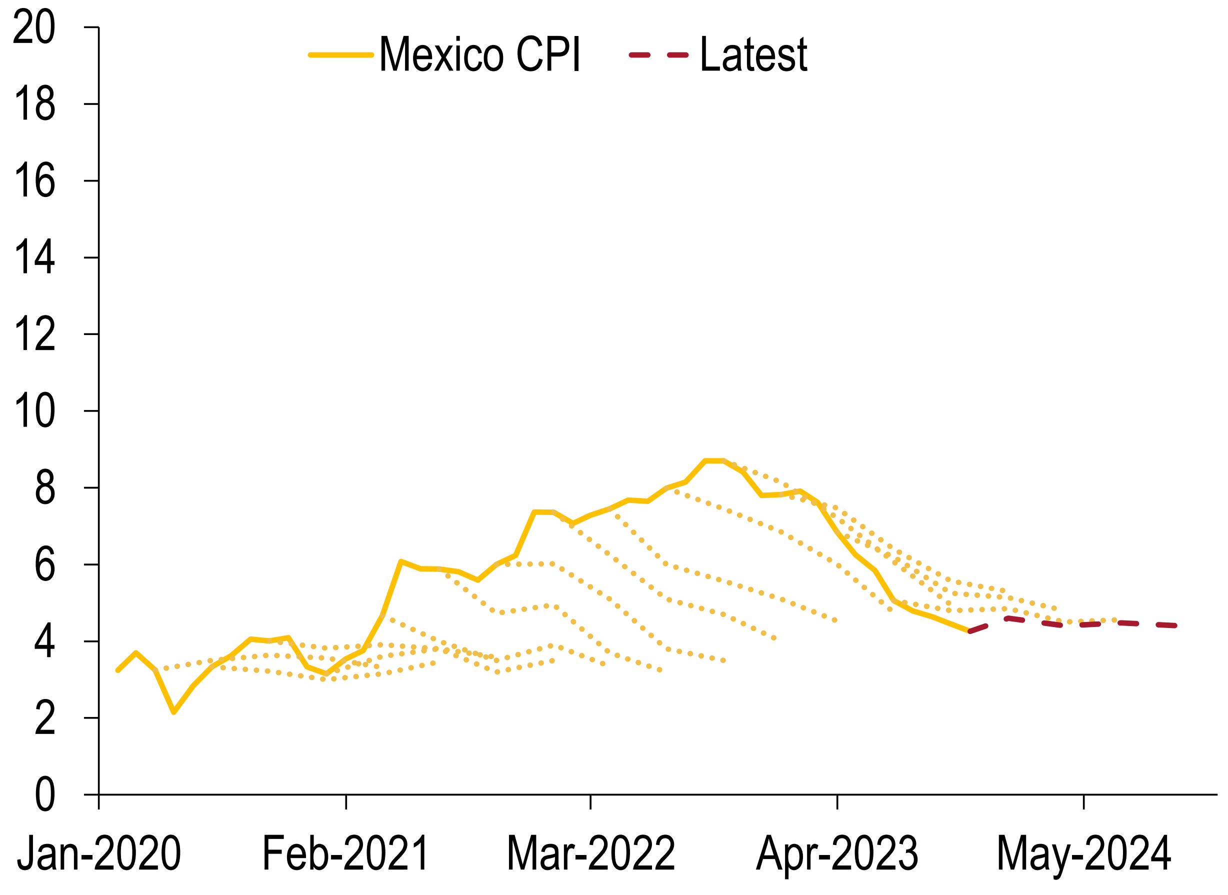
Markets remain optimistic about inflation in Emerging Markets

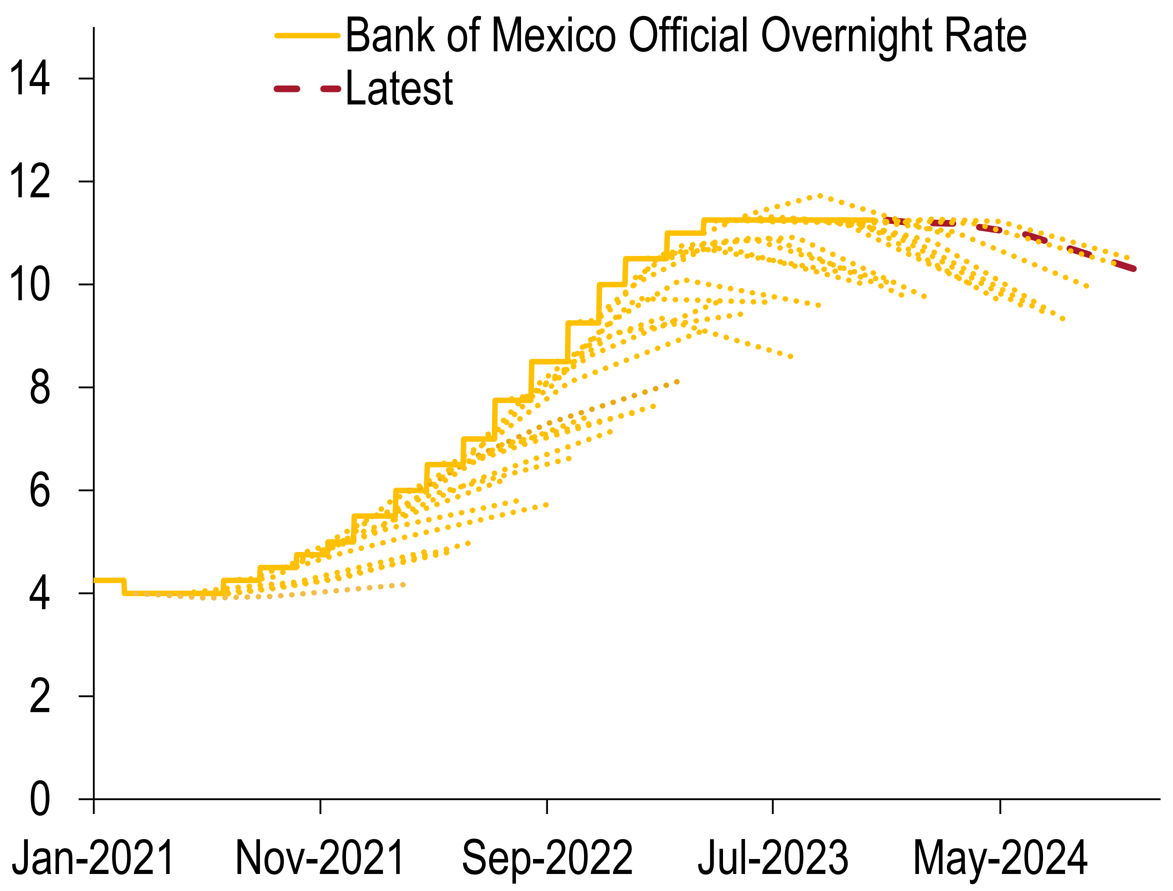
Brazil Inflation and Policy Rate Expectations
(Percent)



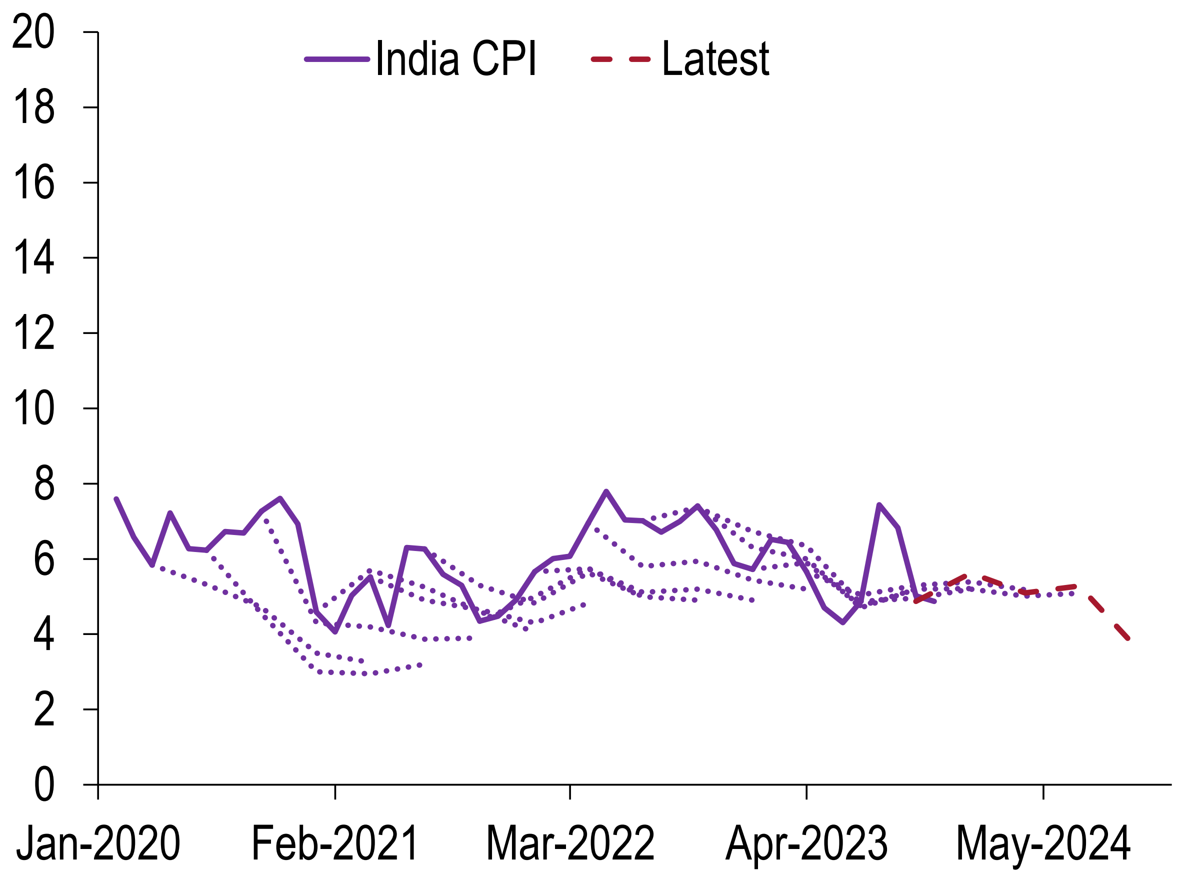


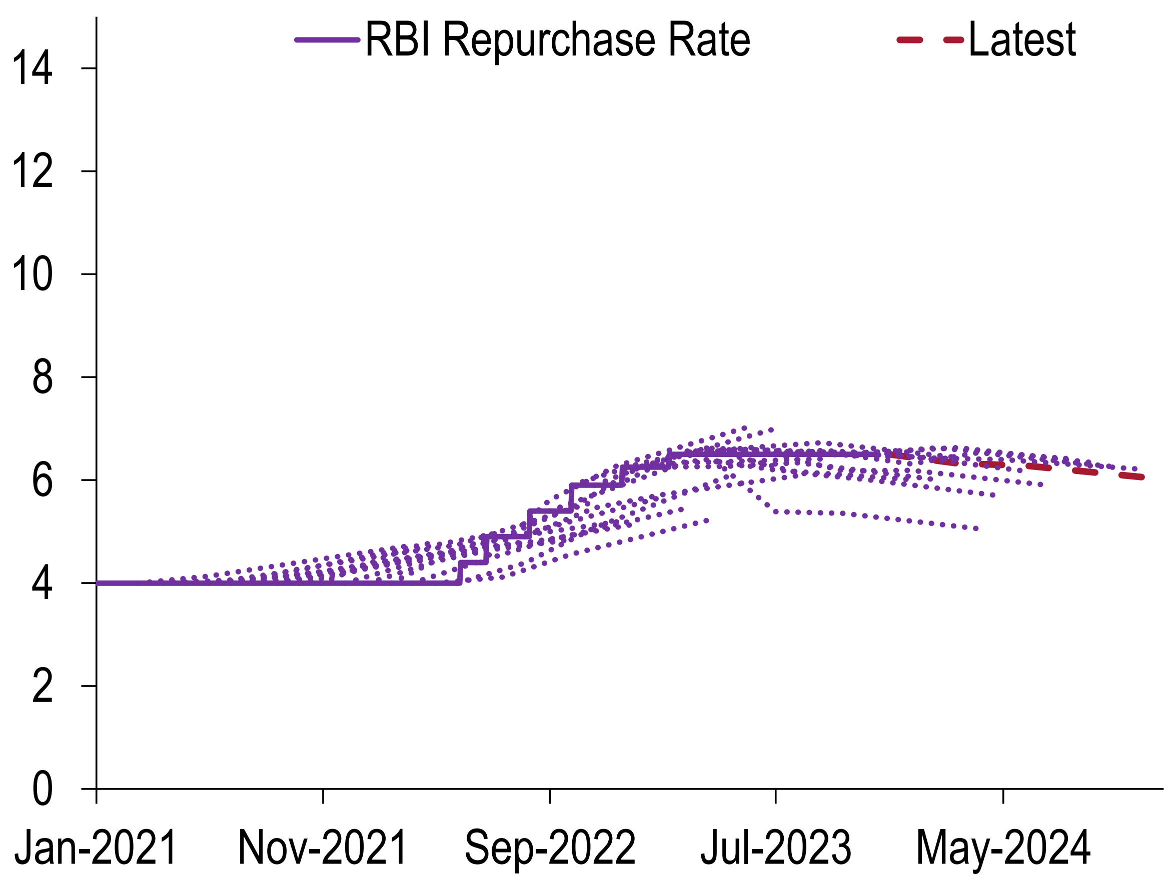
Mexico Inflation and Policy Rate Expectations
(Percent)



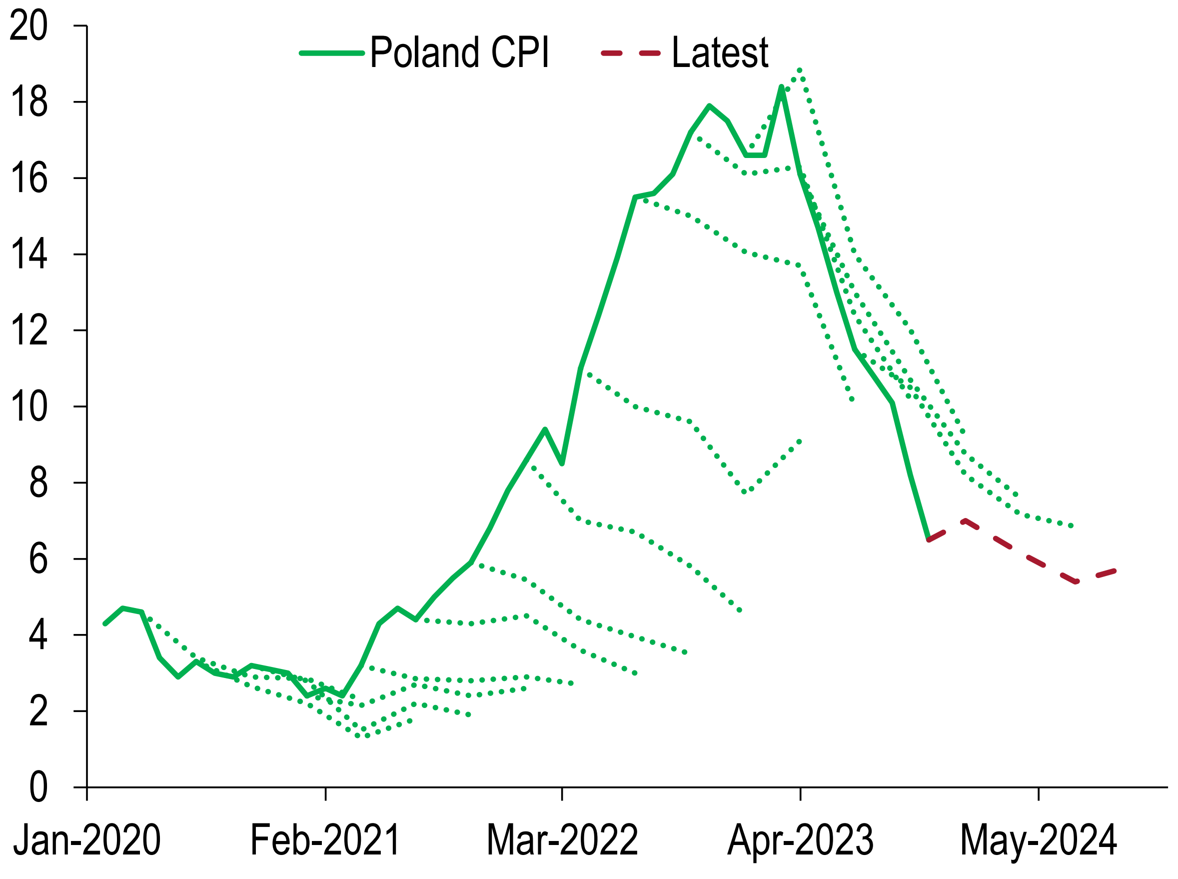


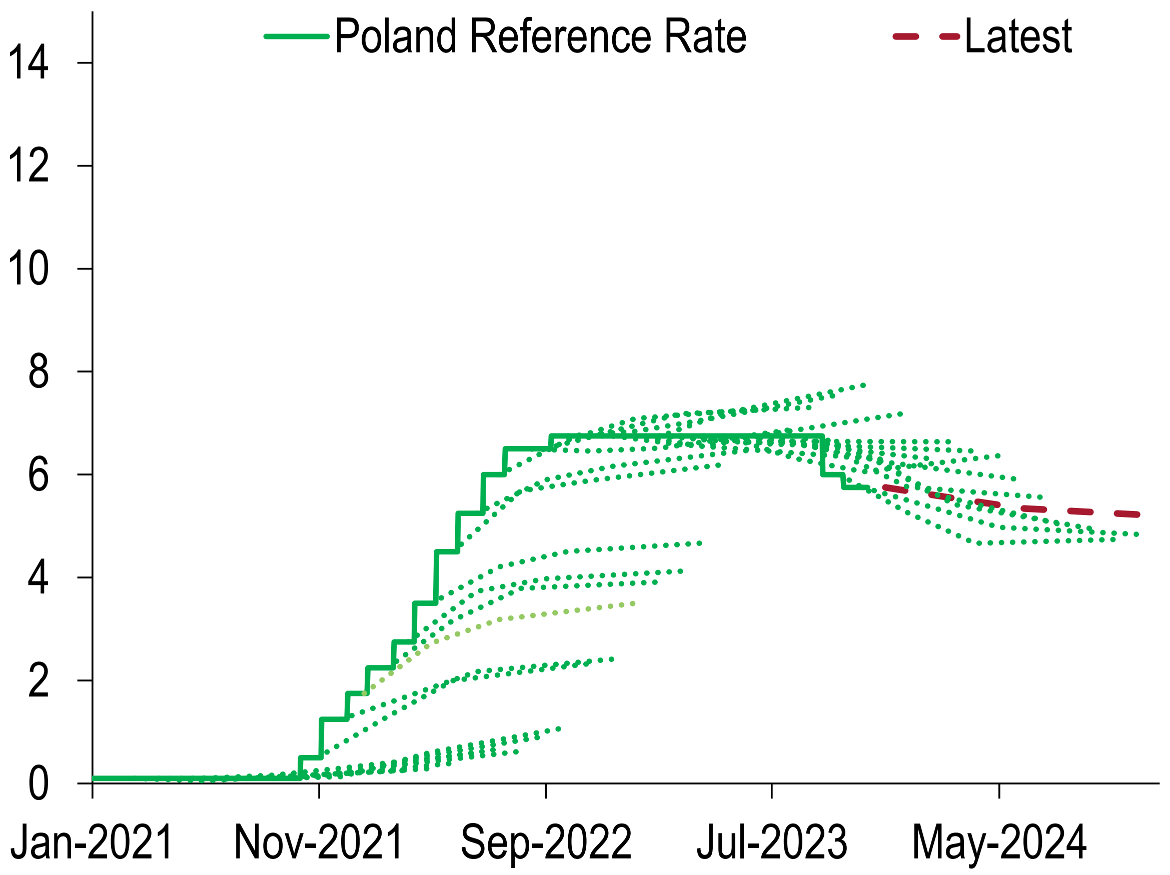
India Inflation and Policy Rate Expectations
(Percent)





Poland Inflation and Policy Rate Expectations
(Percent)

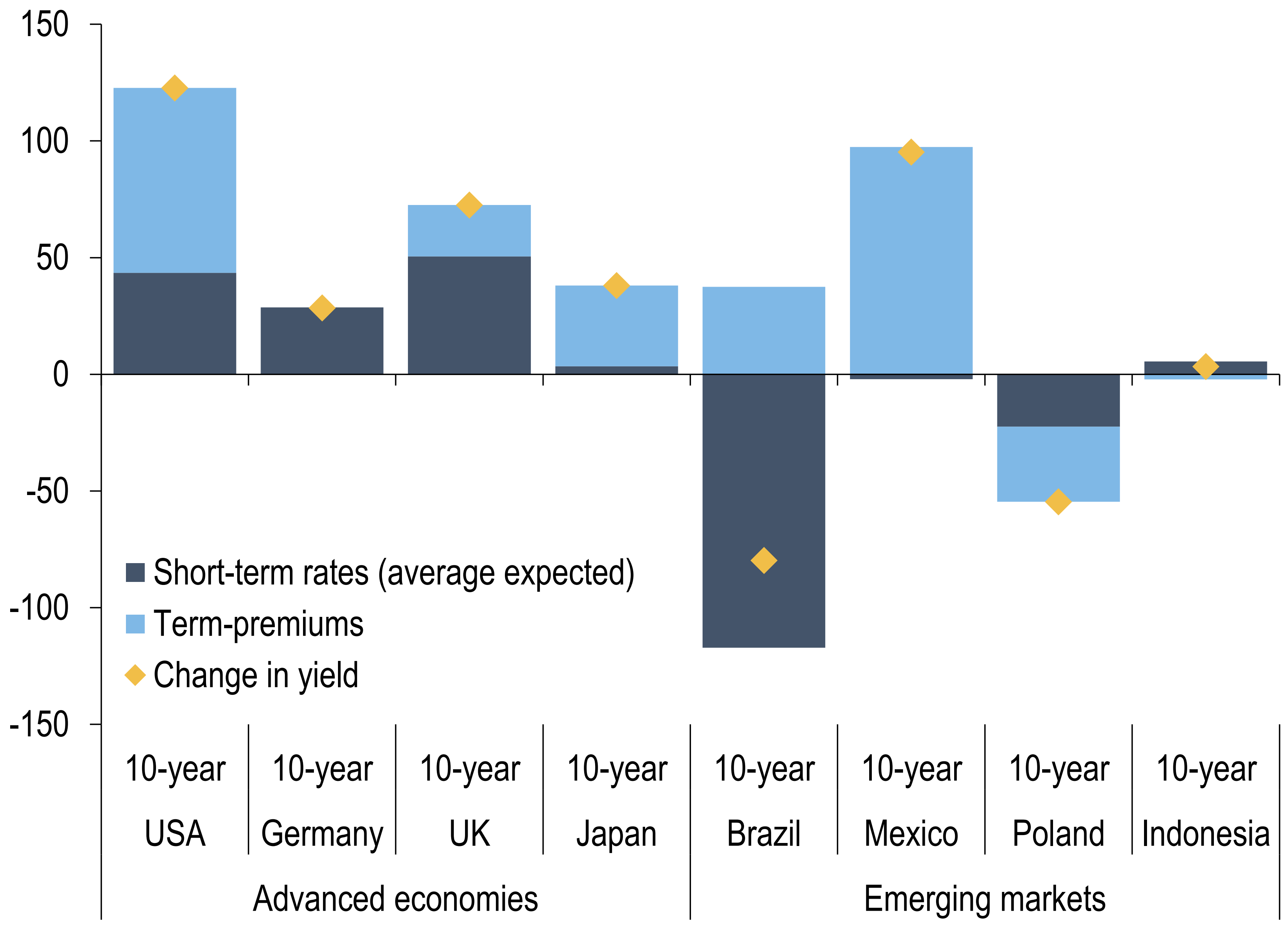




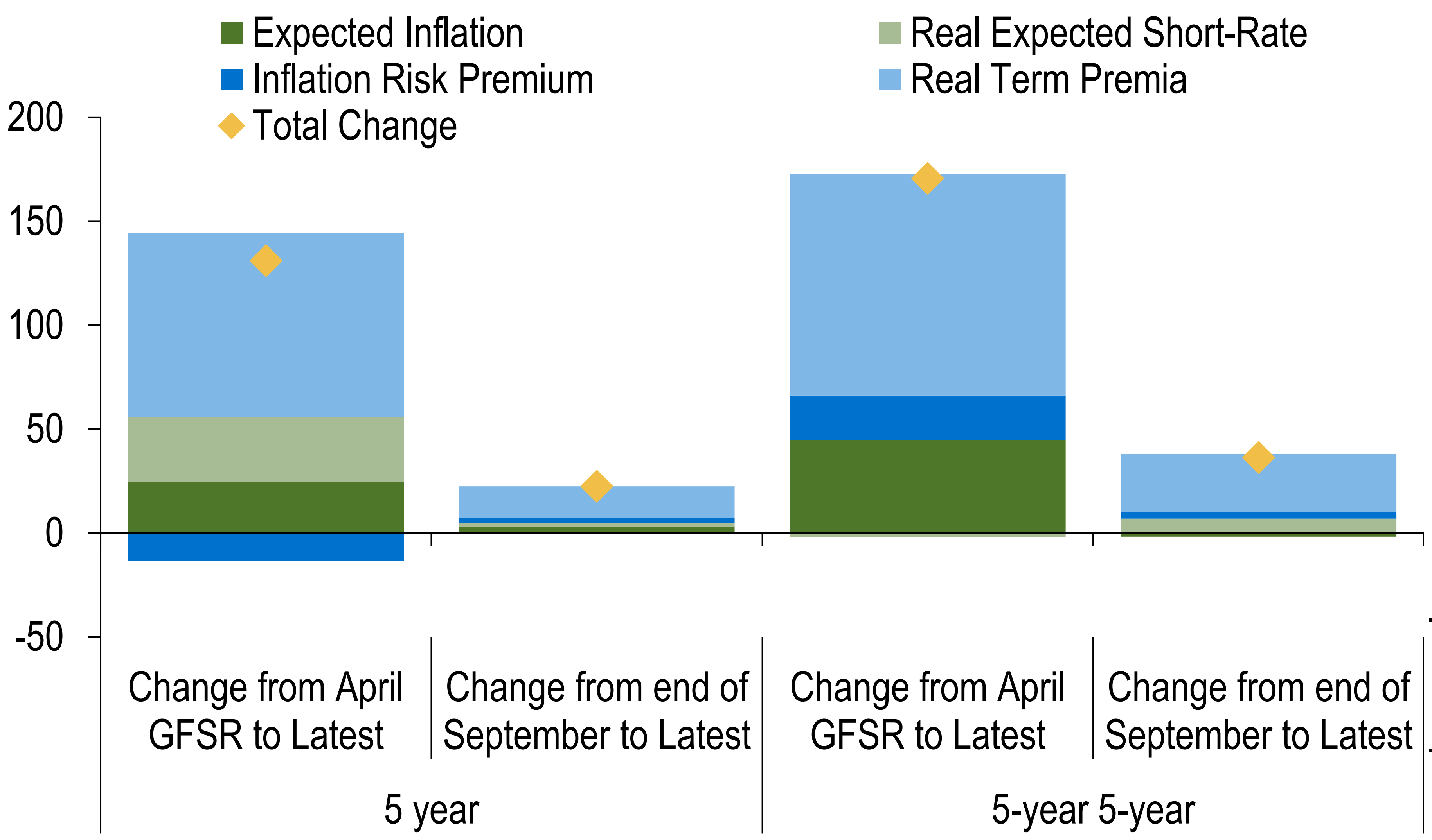
Note: Dotted lines indicate economists' consensus expectations for the inflation charts and expectations of the future path of interest rates in the policy rate charts.

Rise in bond yields has been driven by term premia

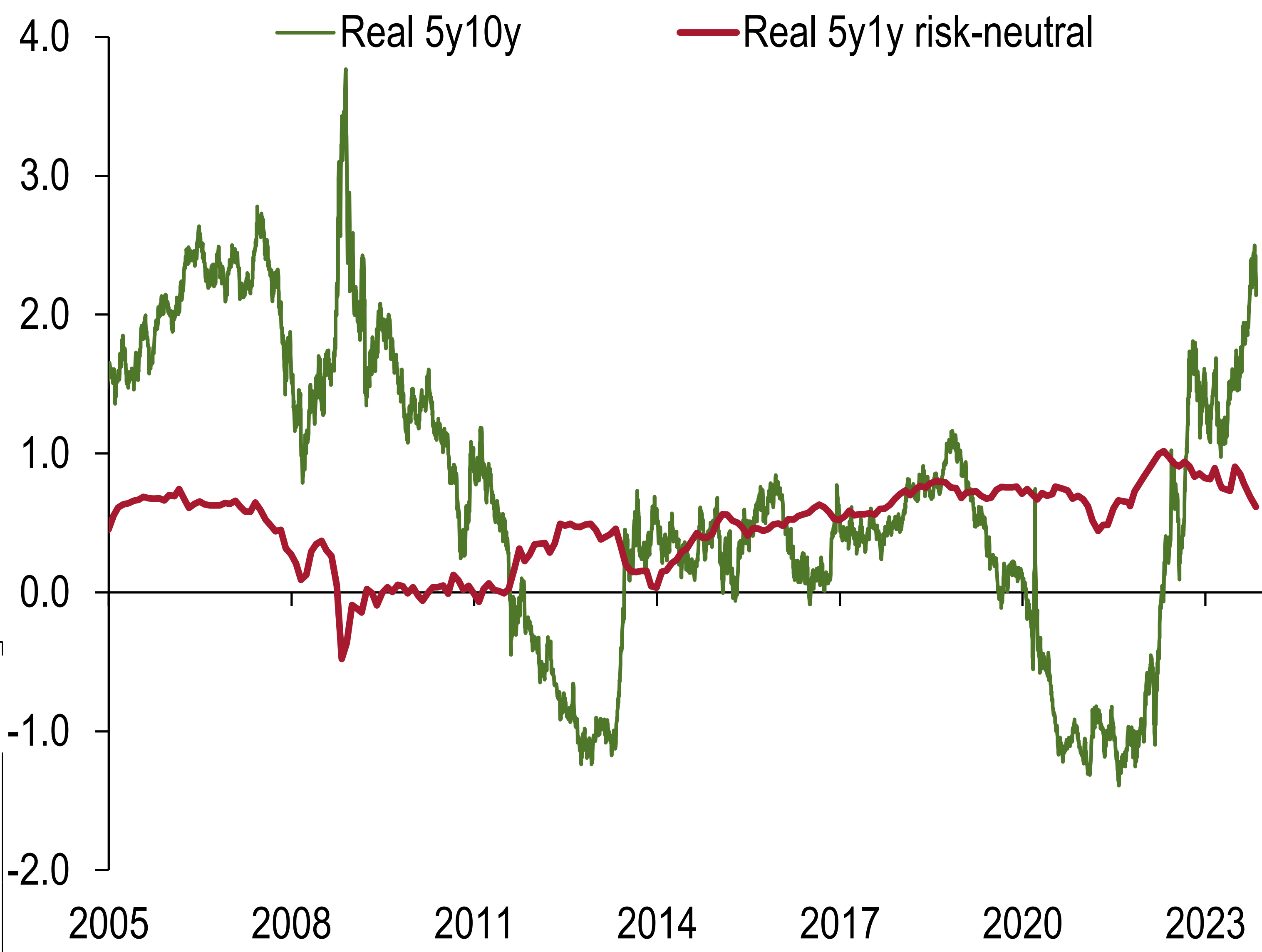
Change in 10-Year Government Bond Yields and Its Decompositions Since the April GFSR
(Basis points)



Change in Term Structure of US Government Bond Yields and Its Decomposition
(Basis points)



Market Implied Real Borrowing Cost Forward and Market Implied r*
(Percent)

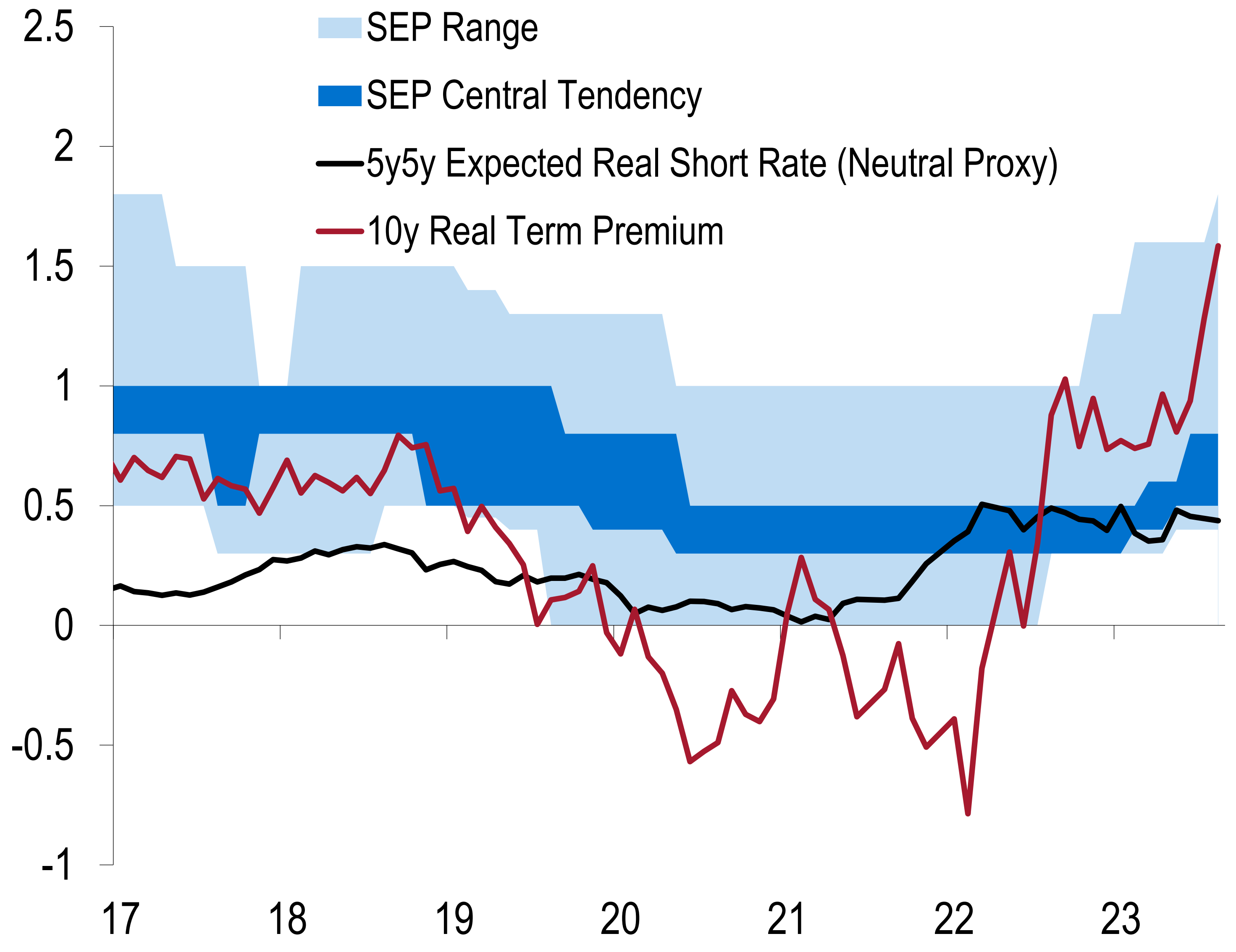


Note: Latest data as of October 17th close.

Long-Dated Bond Yields Driven By Fiscal Concerns and Other Factors

Market-implied r Hasn't Moved Much While Real Term Premiums Spiked...*

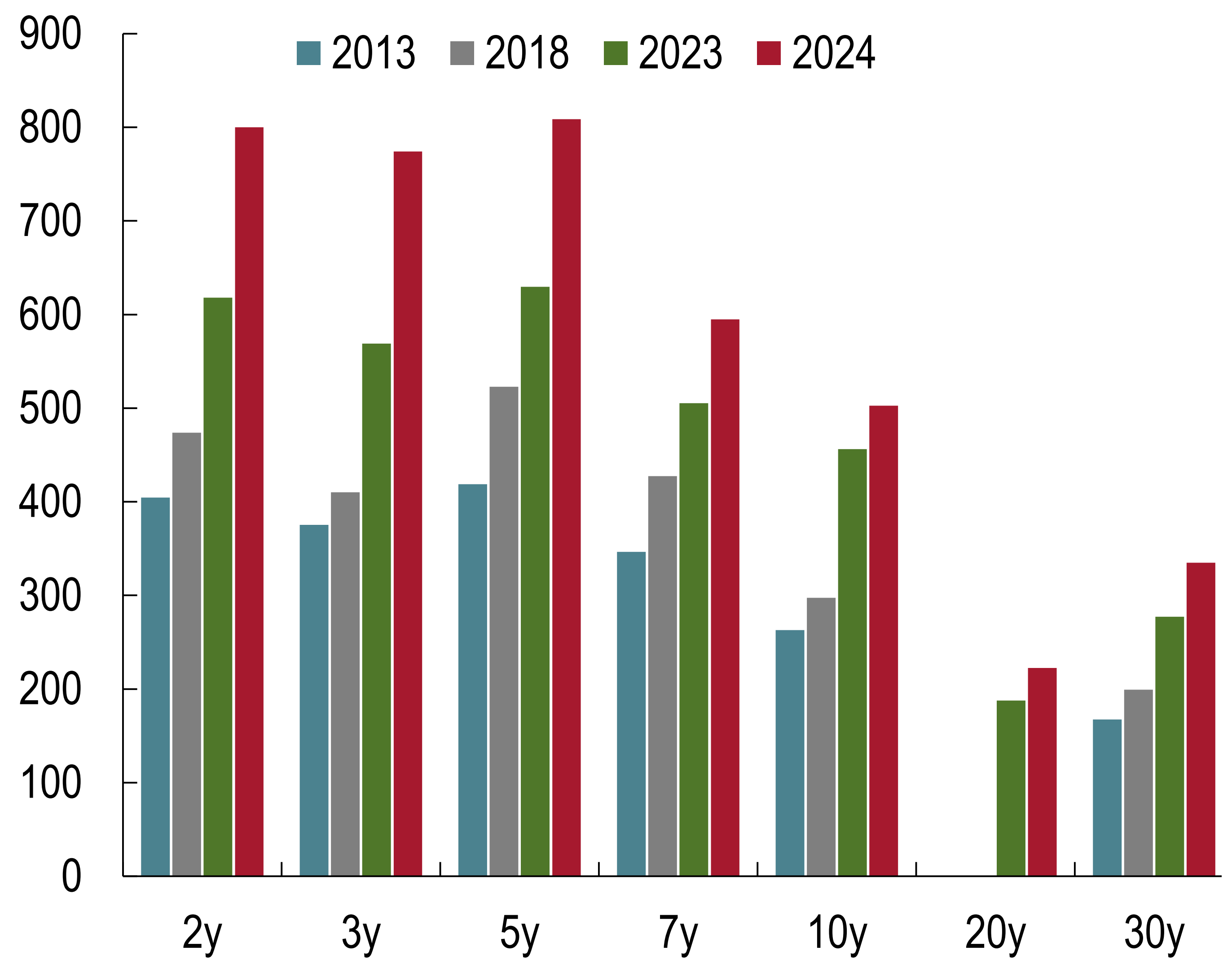
Long-Term Real Fed Fund Dots, Market-Implied Real Neutral and Real Term Premia
(Percent)



Source: Bloomberg L.P., Federal Reserve Board, Haver, IMF Staff Calculations
Note: Real short rate and real term premia based on Abrahams et. al (2016)

... Amid a Sizeable Increase of Treasury Supply Across All Tenors

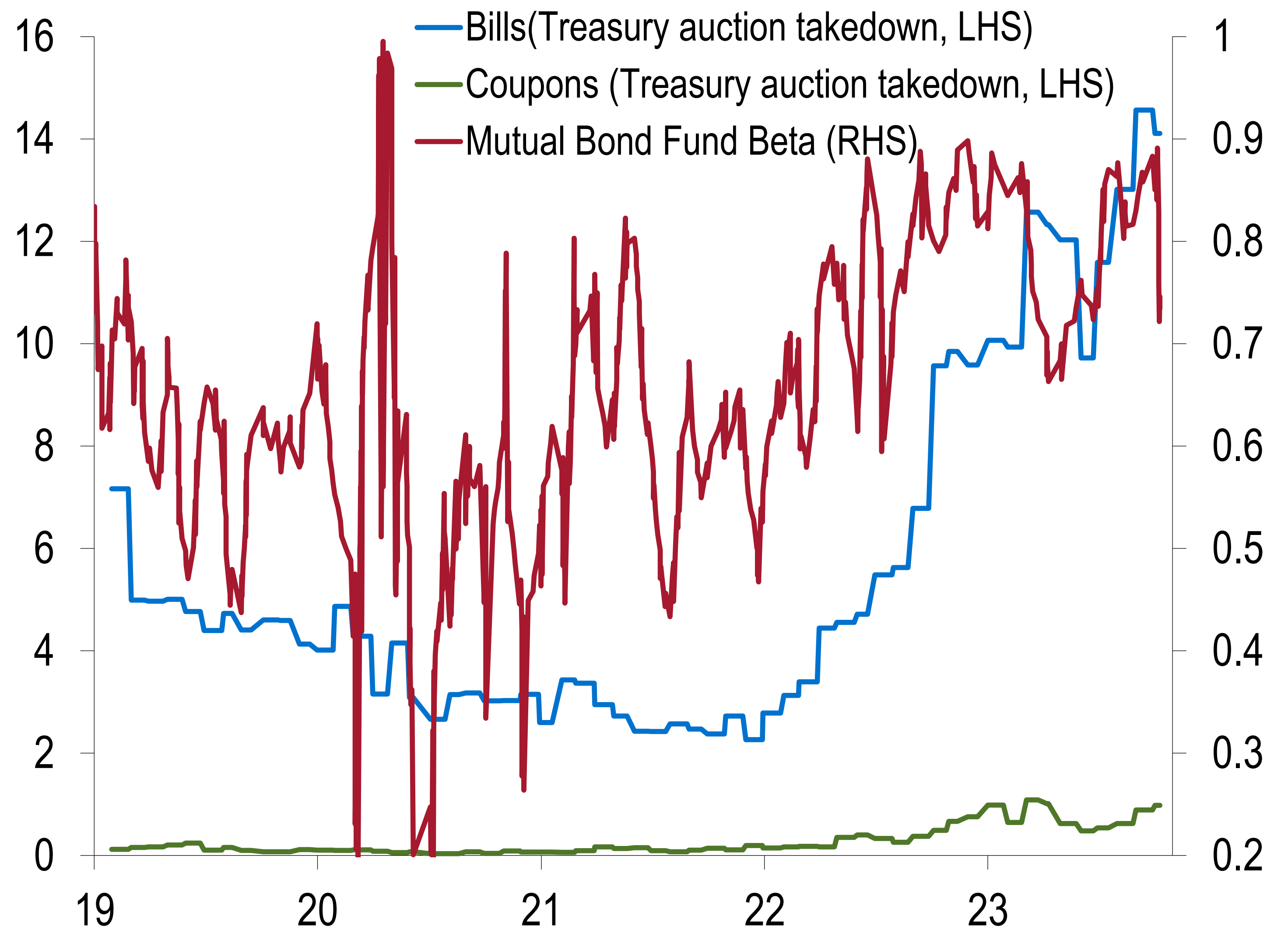
Treasury Auction Sizes
(USD bn)



Source: Bloomberg L.P., Apollo, IMF Staff Calculations

Retail Investors Bought T-Bills

Individual Auction Take-Down vs. Bond Mutual Fund Beta to Benchmark Index
(USD bn, percent)

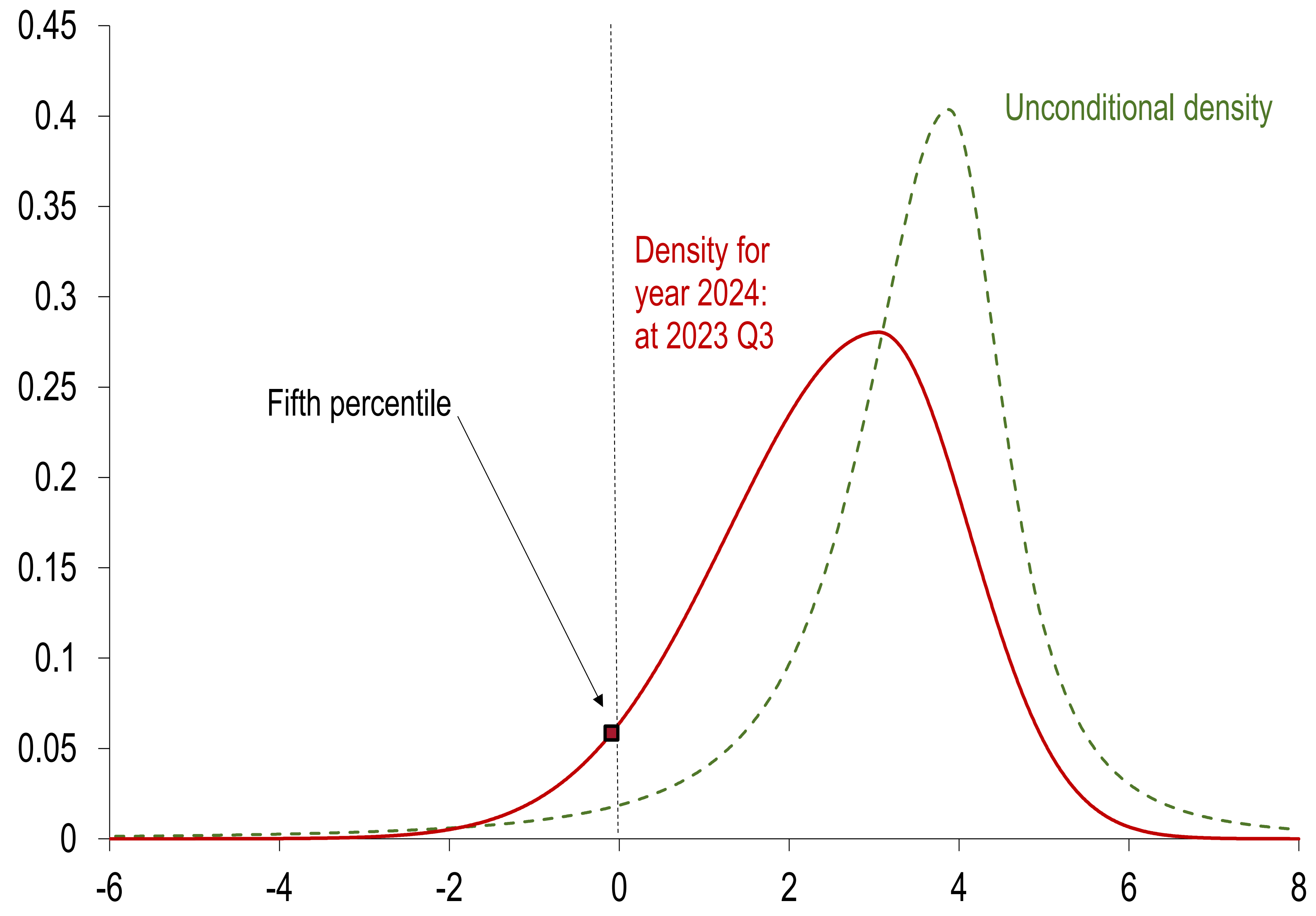


Source: Bloomberg L.P., JP Morgan, IMF Staff Calculations
Notes:
- 4-week rolling sum of auction allotment by individuals
- 21-day rolling beta of 20 biggest active US bond mutual fund managers with respect to the US Agg Bond Index.

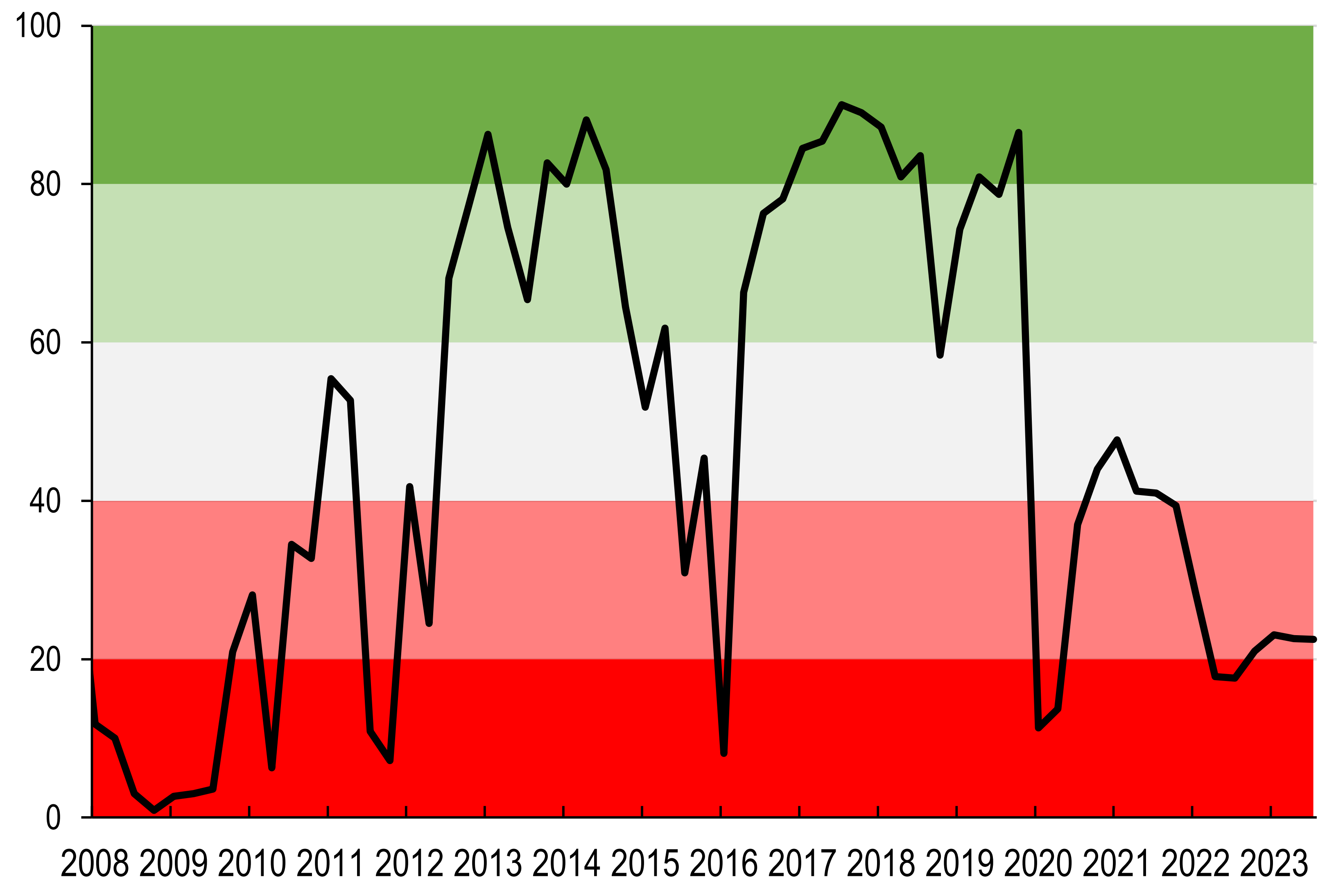
Growth-at-risk indicates elevated downside

Risks to global growth are forecasted to remain skewed to the downside next year

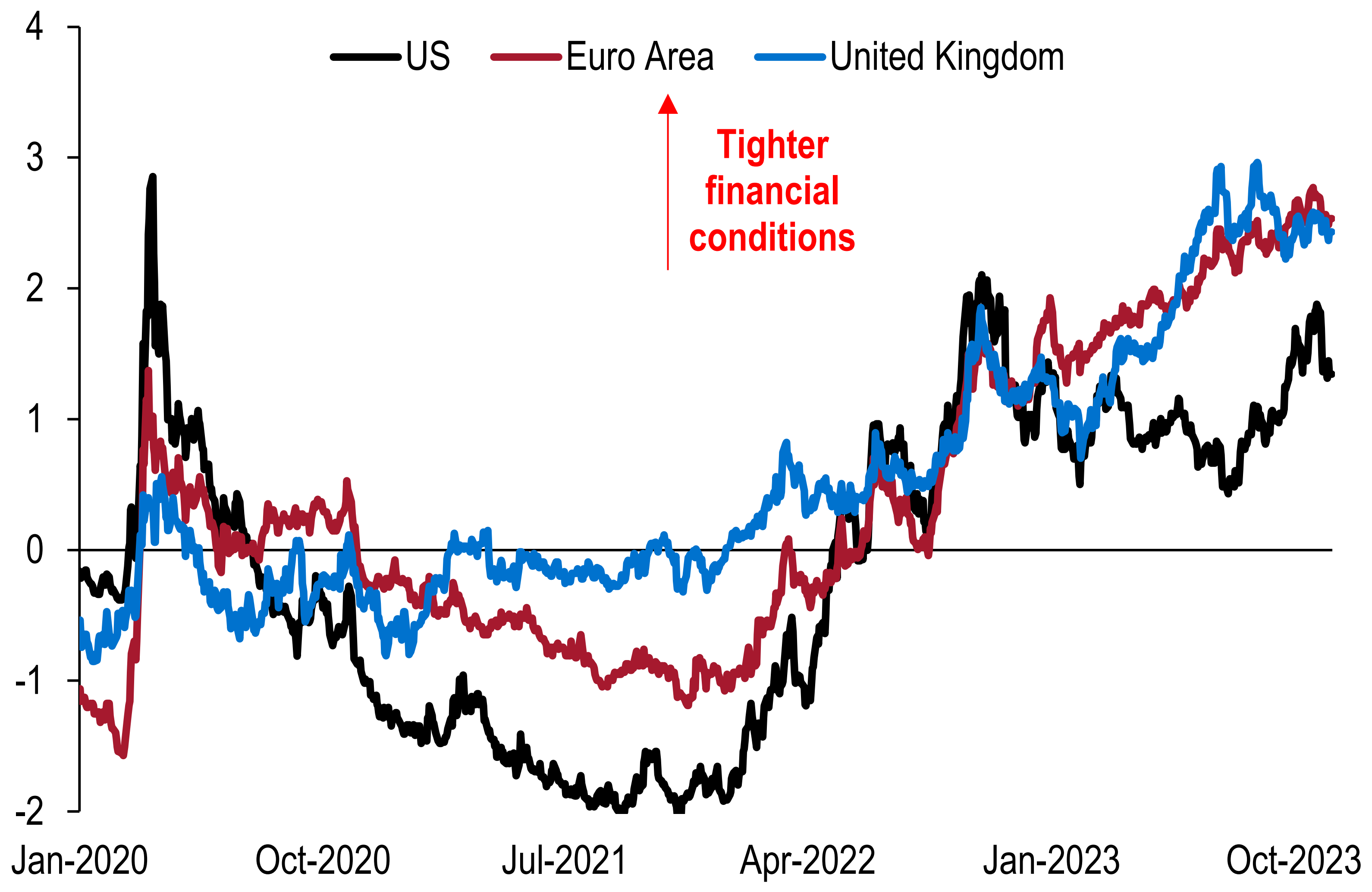
Growth Forecast Densities
(Probability density)



Near-Term Growth-at-Risk Forecasts
(Percentile rank)



Goldman Sachs Financial Conditions Index
(Z-Score since 2017)

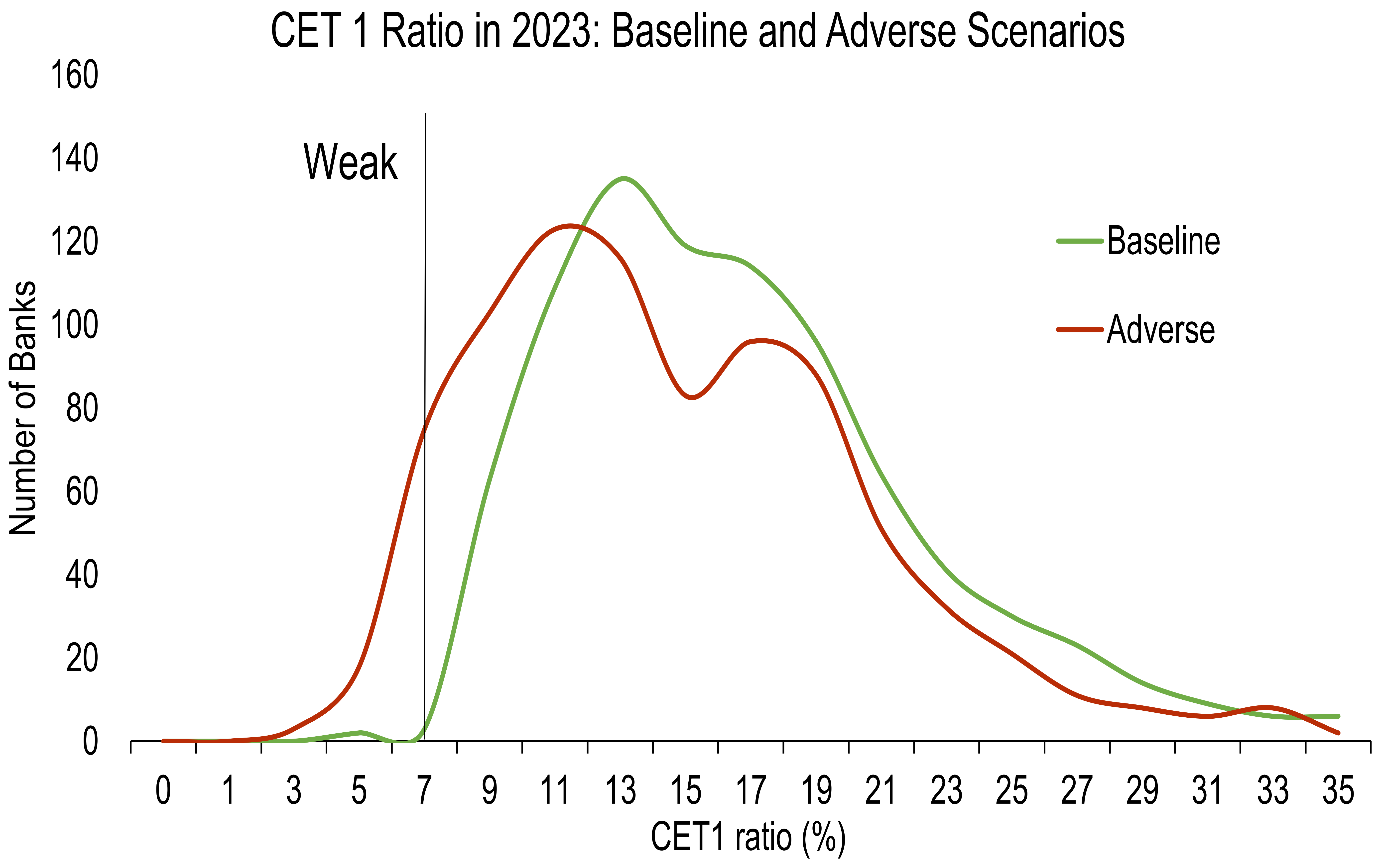


Note: The global conditional forecast density model employed here augments information on current quarter growth and financial conditions (see April 2018 Global Financial Stability Report) with a proxy for global credit growth (see Adrian et al, 2022 AEJ: Macro). This credit growth variable is constructed as a PPP-GDP weighted aggregate of country-specific quarterly growth rates in total credit to the private non-financial (household and non-financial corporates) sector, provided by domestic banks and all other sectors of the economy. Credit data are sourced from the Bank for International Settlements. Goldman Sachs Financial Conditions is sourced from Goldman Sachs Global Investment Research.

The global banking sector has a notable tail of weak banks (Chapter 2)

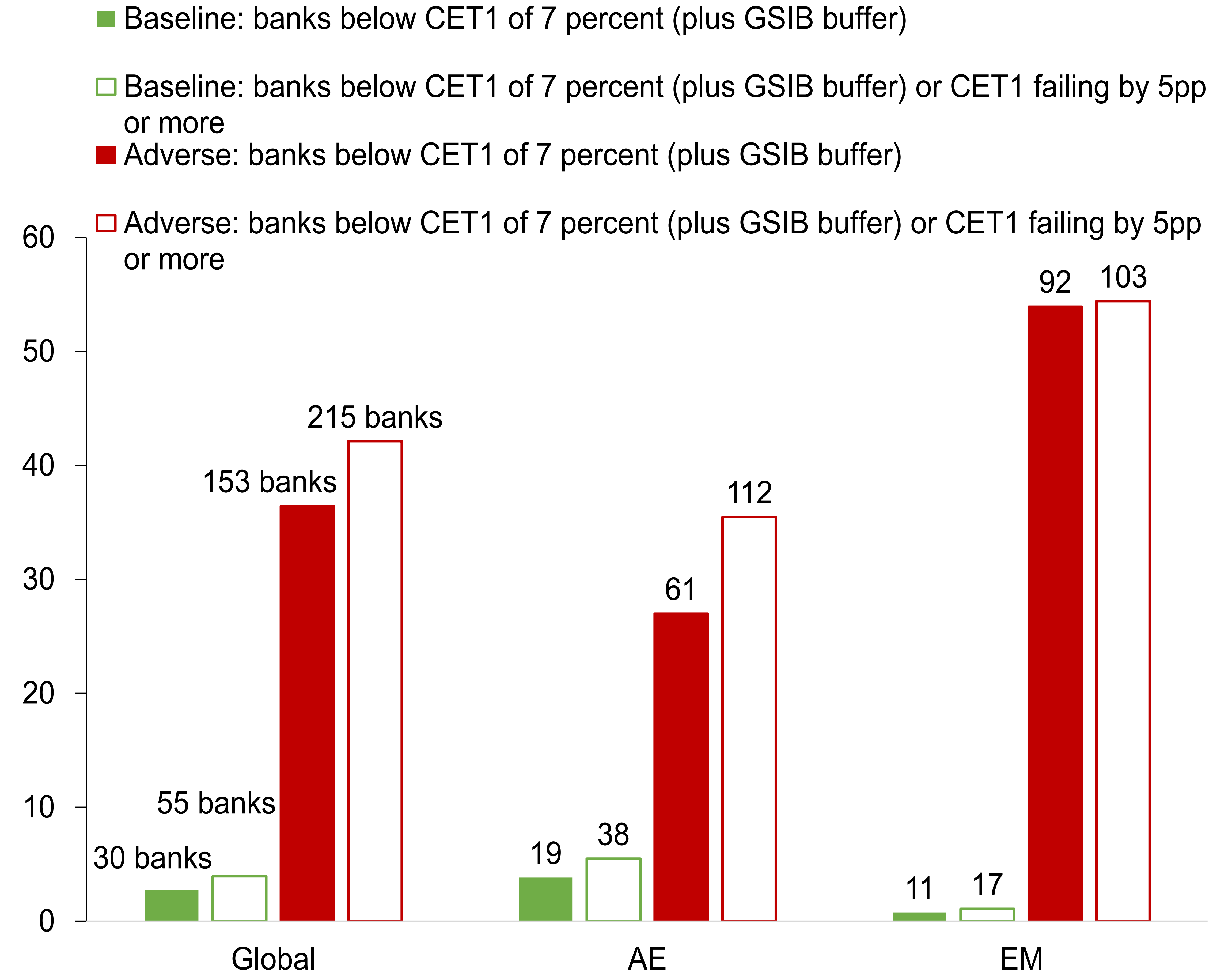
In a stagflation scenario, some banks could fail to meet minimum capital requirements

Distribution of CET1 Ratio in 2023
(Number of Banks)



Both AE and EM banks could be vulnerable

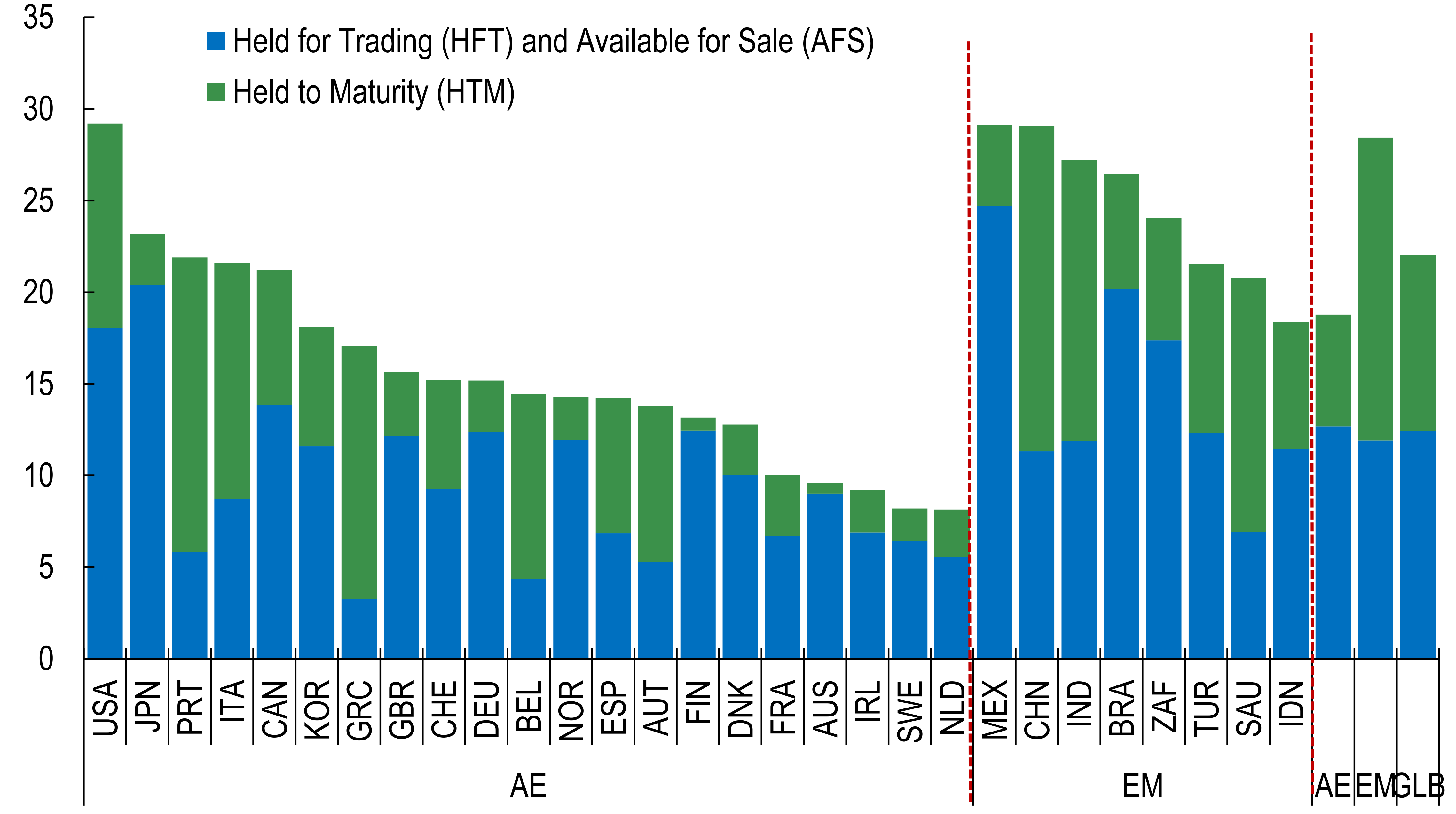
Geographical Distribution of Banks with Low Post-stress Capital
(Share of Total Assets By Region;
Number of Banks Shown on Top of Bars)



Bank capital is affected through bond valuation losses

Some banking systems hold large securities portfolios

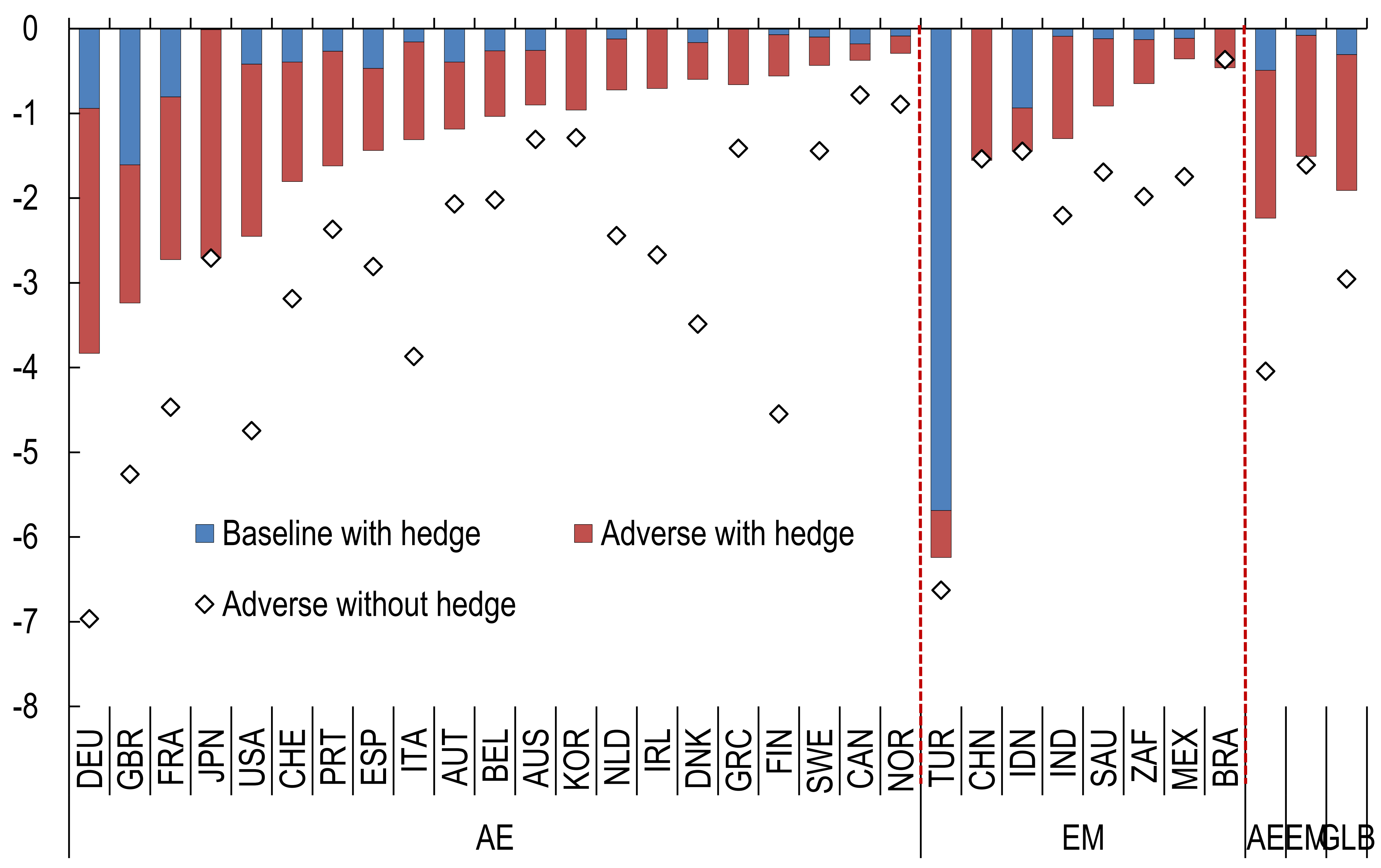
Share of Securities to Total Assets, 2022
(Percent)



Source: IMF Staff Calculations

Exposure size, hedging, and duration are key drivers of valuation impact

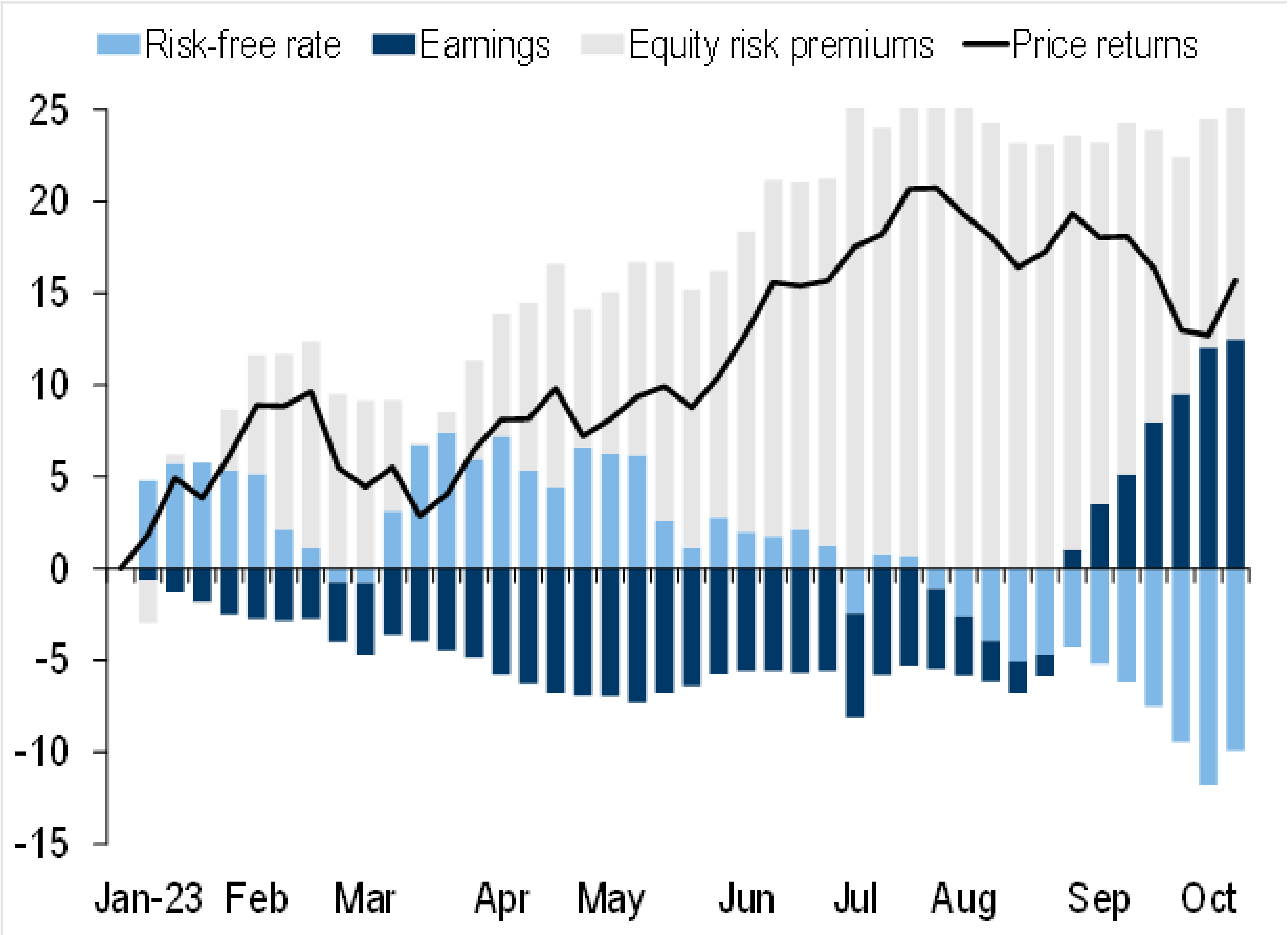
Valuation Impact on HFT and AFS securities, 2023
(Percent of RWA)



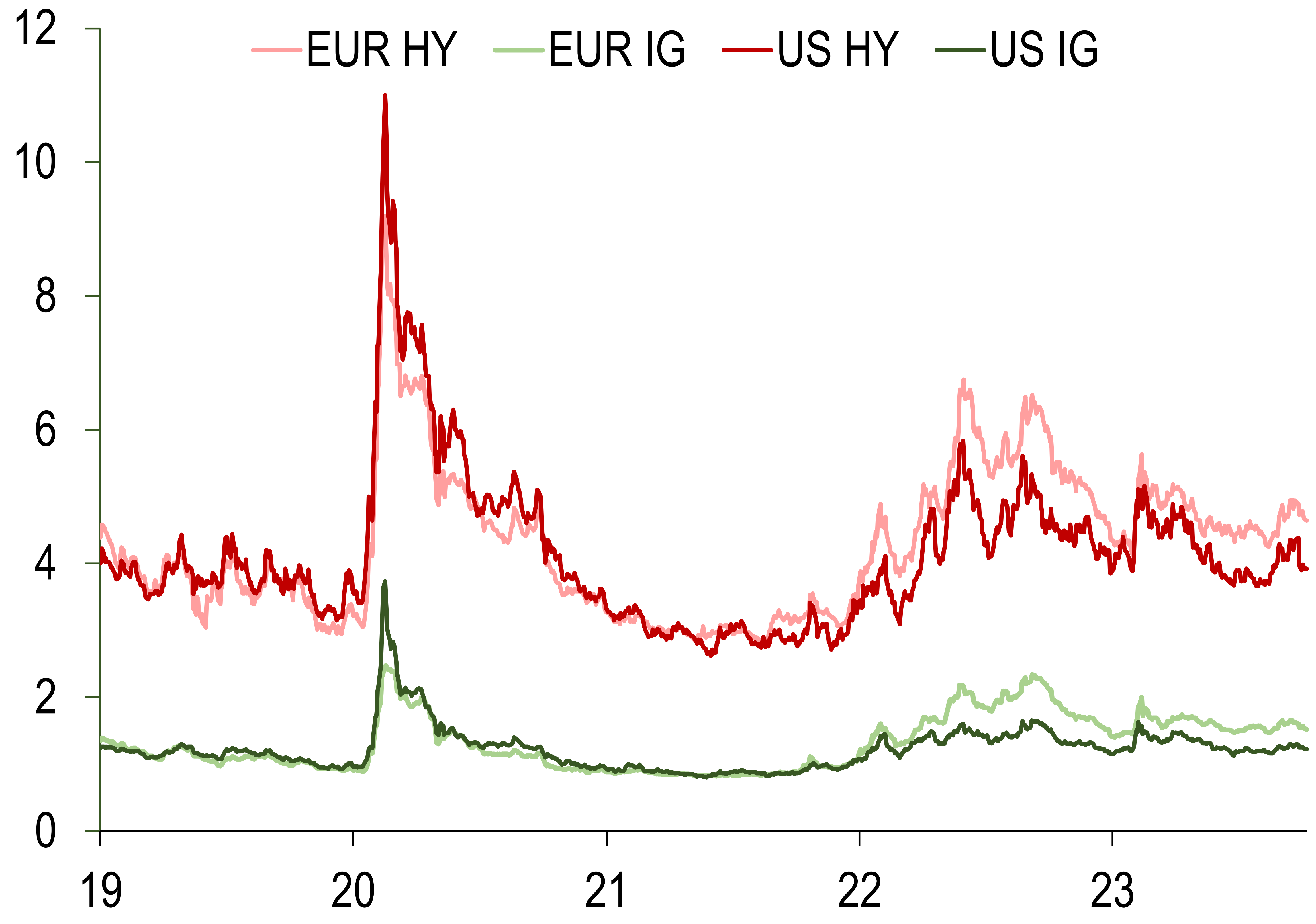
Source: IMF Staff Calculations

Price of risk assets have been driven by increasing investor risk appetite

Decomposition of Cumulative YTD Returns in S&P 500
(Percent)

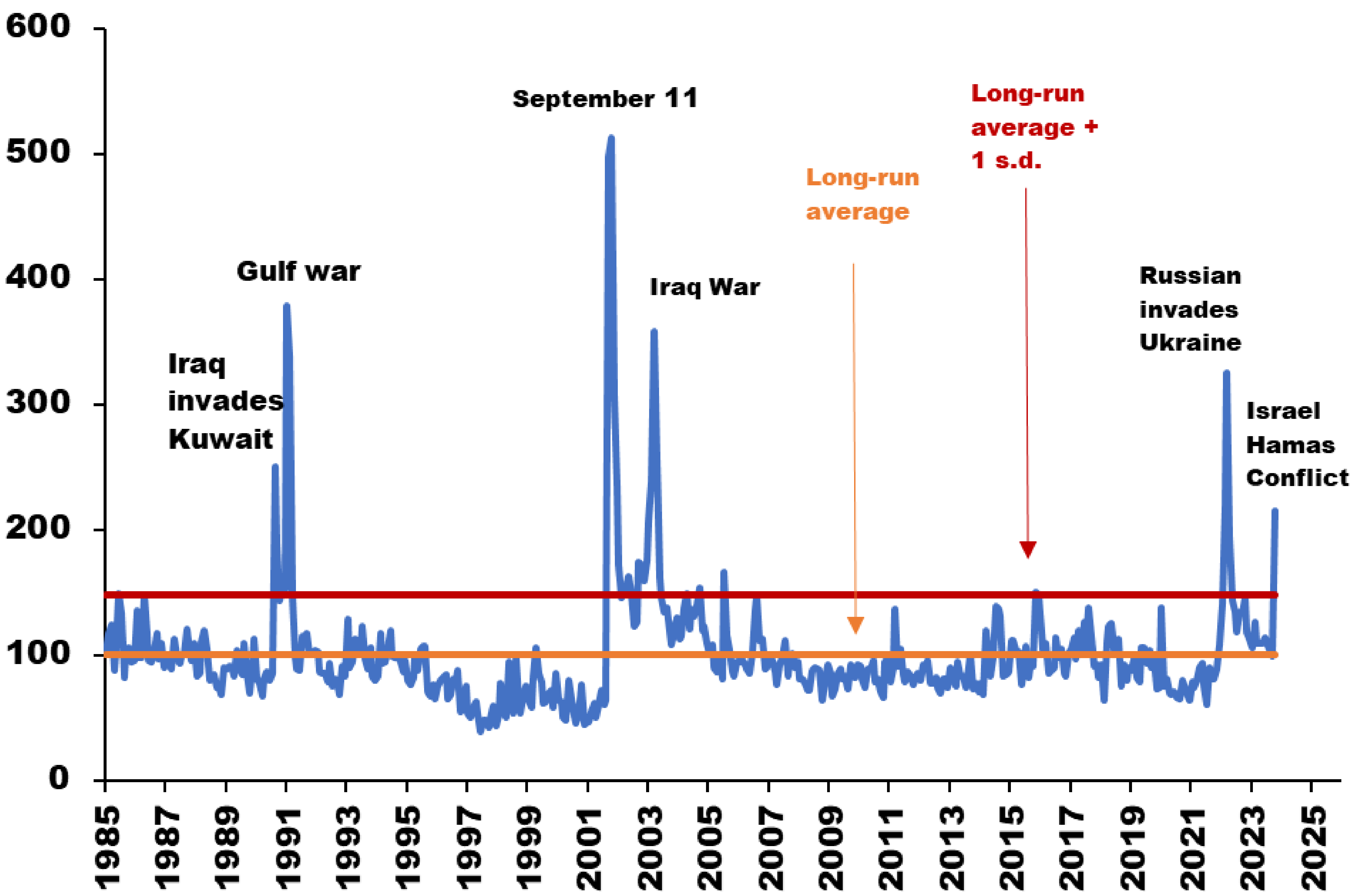


Corporate Bond Option Adjusted Spreads
(Percent)



Geopolitical Uncertainty Could Weigh on Markets

Geopolitical Risk Index
(Caldara and Iacoviello, index points)



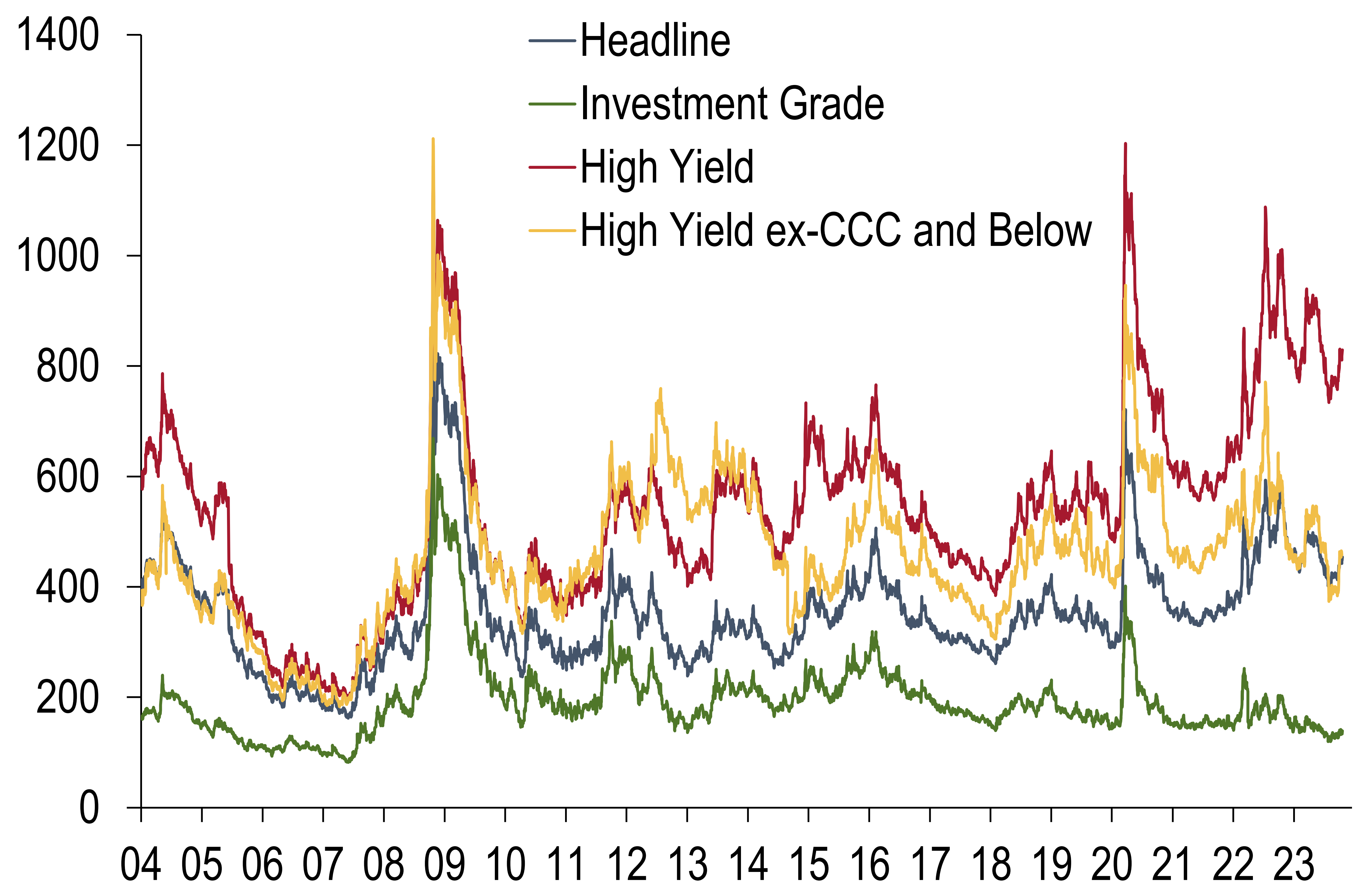
	Peak response (within 12 quarters) GPR rises by 4 s.d.	Two weeks after Israel-Hamas conflict (Oct 6 - Oct 23)
S&P 500	Around -10%	-1.8%
Two-year	Around -25bps	-4.1bps
VIX	Around +2pts	+3.9pts
Broad dollar (DXY)	N/A	-0.5%

Note: Based on vector autoregression results of Caldara and Iacoviello (2022).

Investors continue to differentiate among EMs based on fundamentals

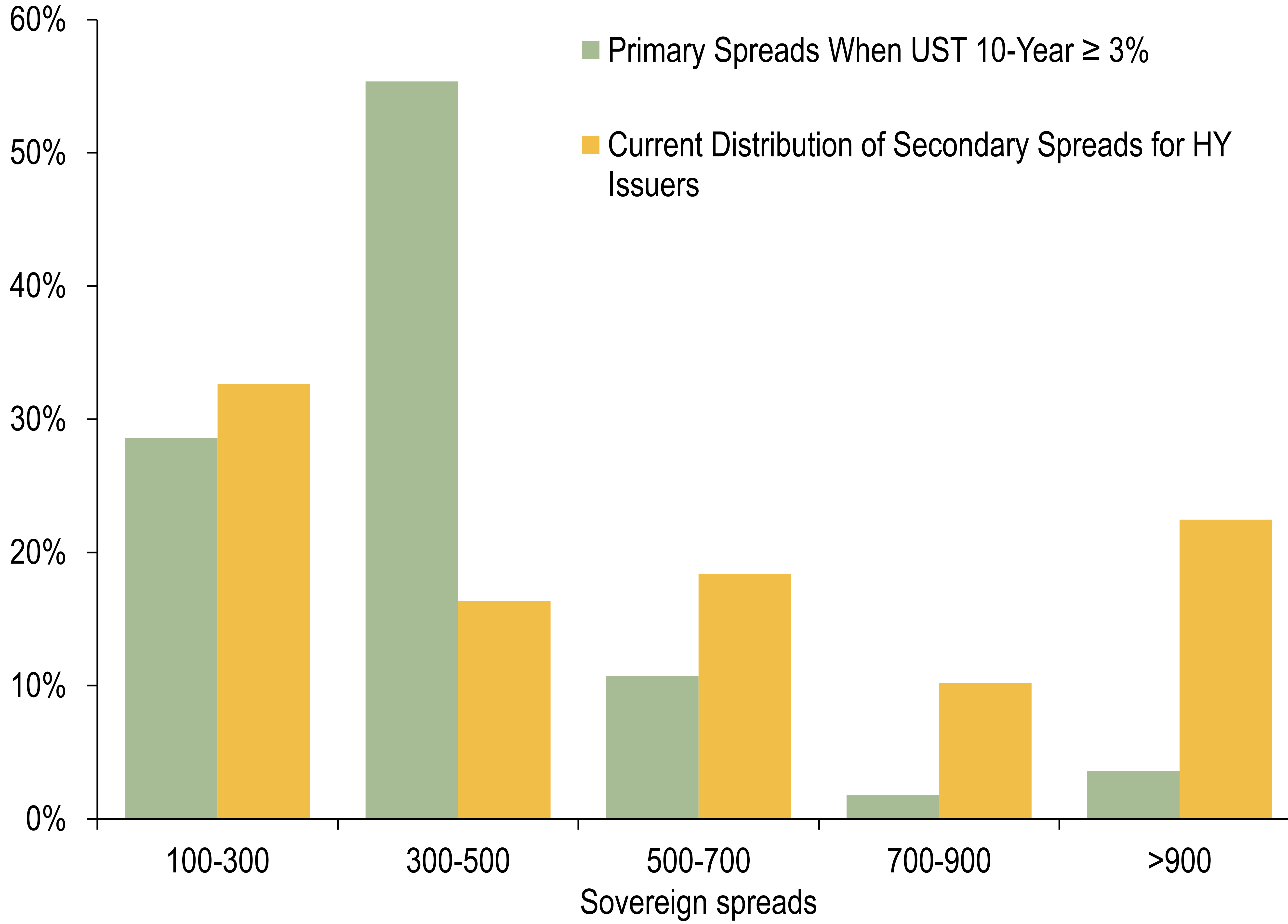
EM IG spreads remain compressed while EM HY spreads (especially lower-rated) are very wide

Emerging Markets Bond Index Global (EMBIG) Diversified Spreads
(Basis points)



Access to primary markets remains challenging, particularly for frontiers and low-income EM sovereigns

Distribution of Historical High-Yield Sovereign Issuance and Treasury Yields
(Percent)

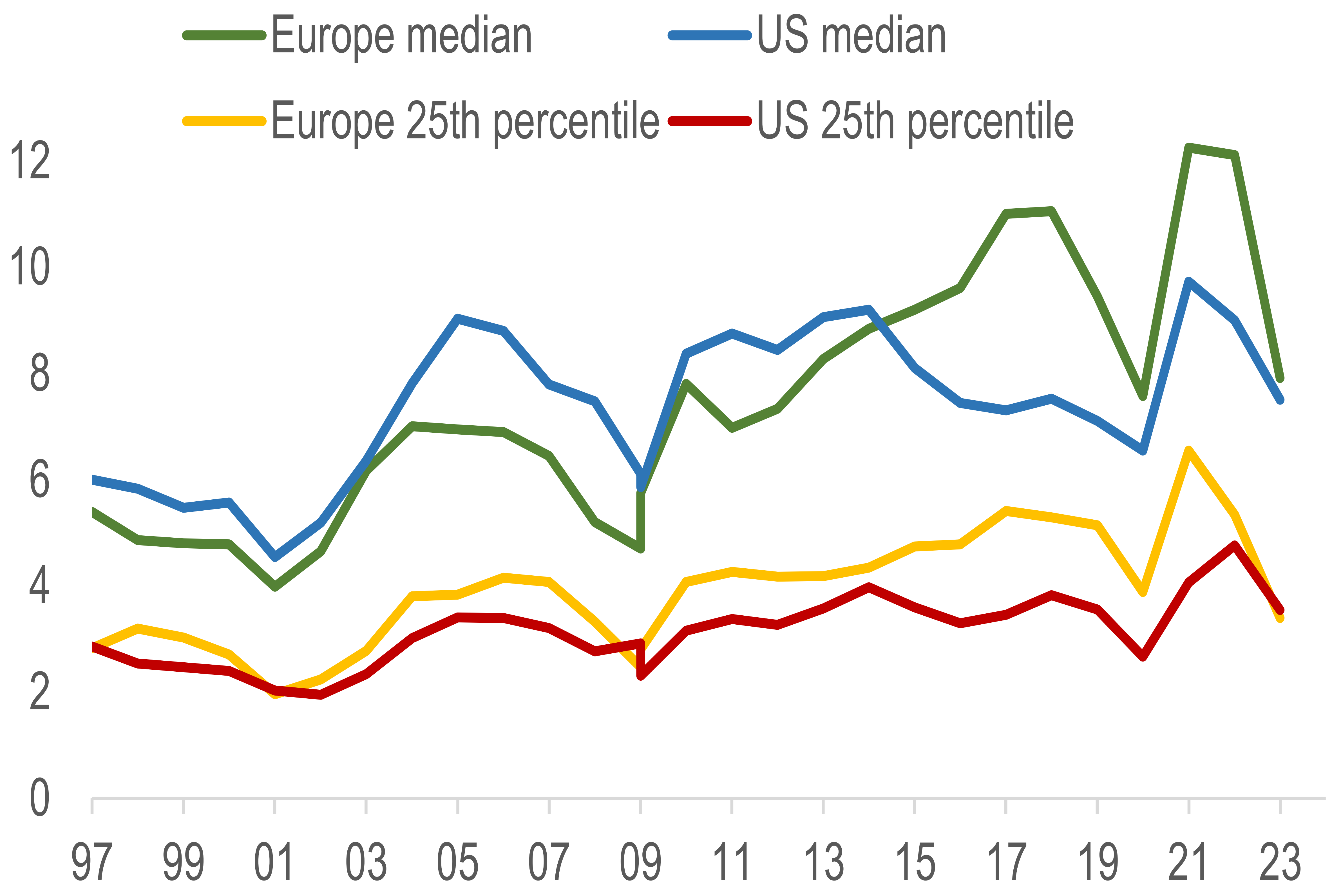


The credit cycle is turning as corporate buffers deplete

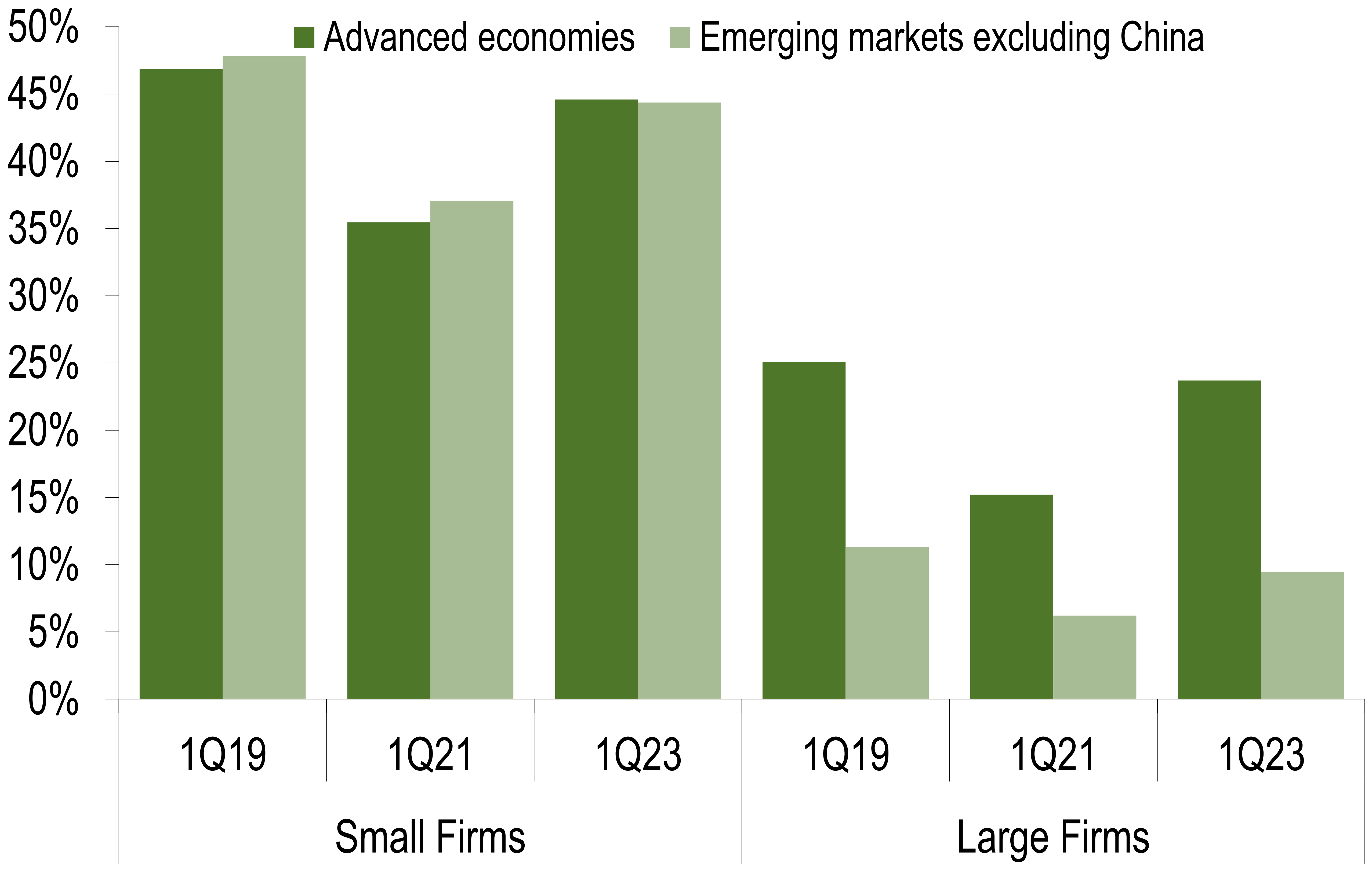
Interest coverage ratios have declined, but they remain higher than historical averages

The number of firms that do not have enough cash to cover their interest expenses is growing

Non-financial Corporates Interest Coverage Ratio
(Ratio, US S&P 500 and S&P Europe 350 firms)



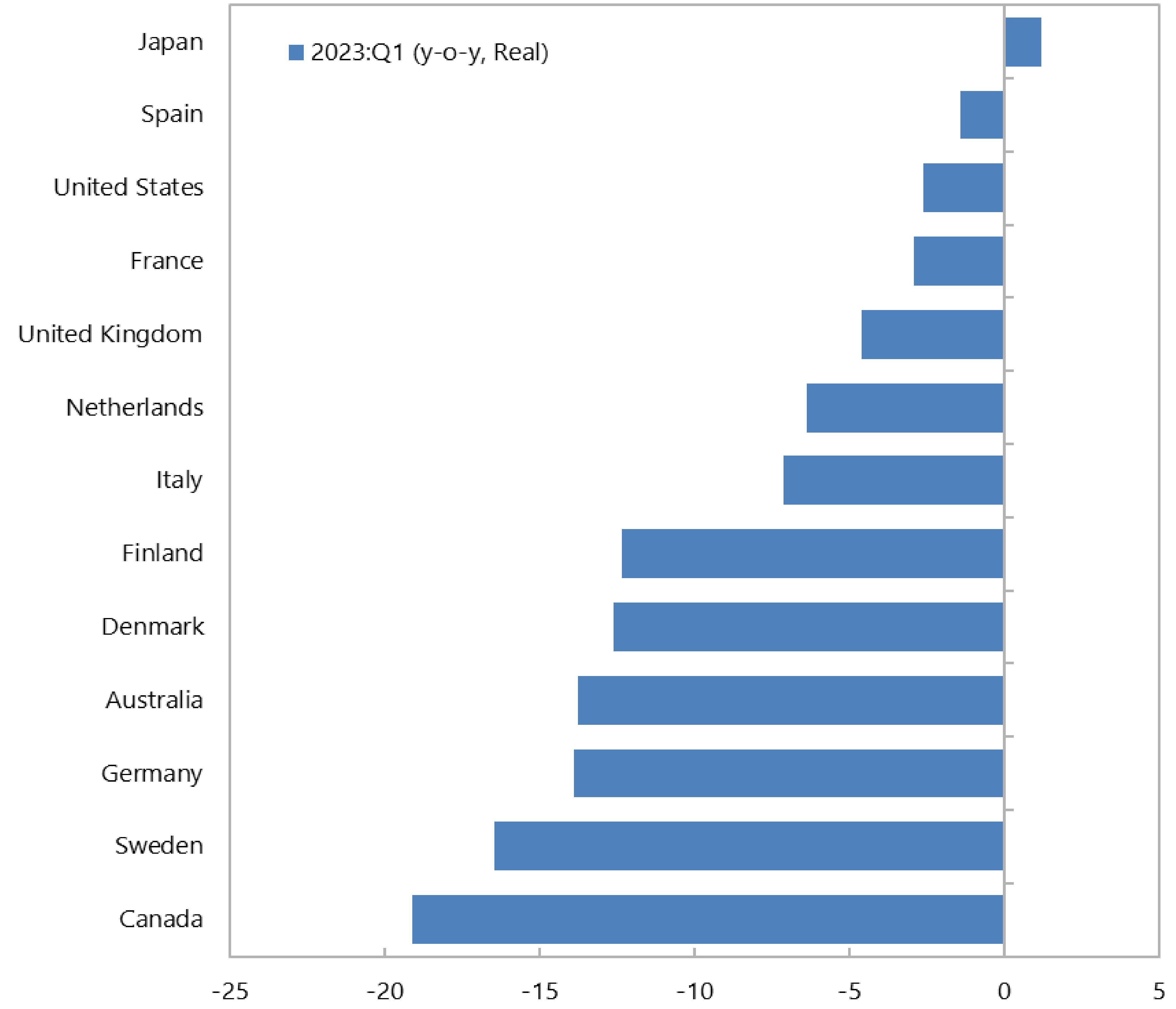
Firms with less cash than interest expenses
(Percent)



Higher interest rates are putting real estate under pressure

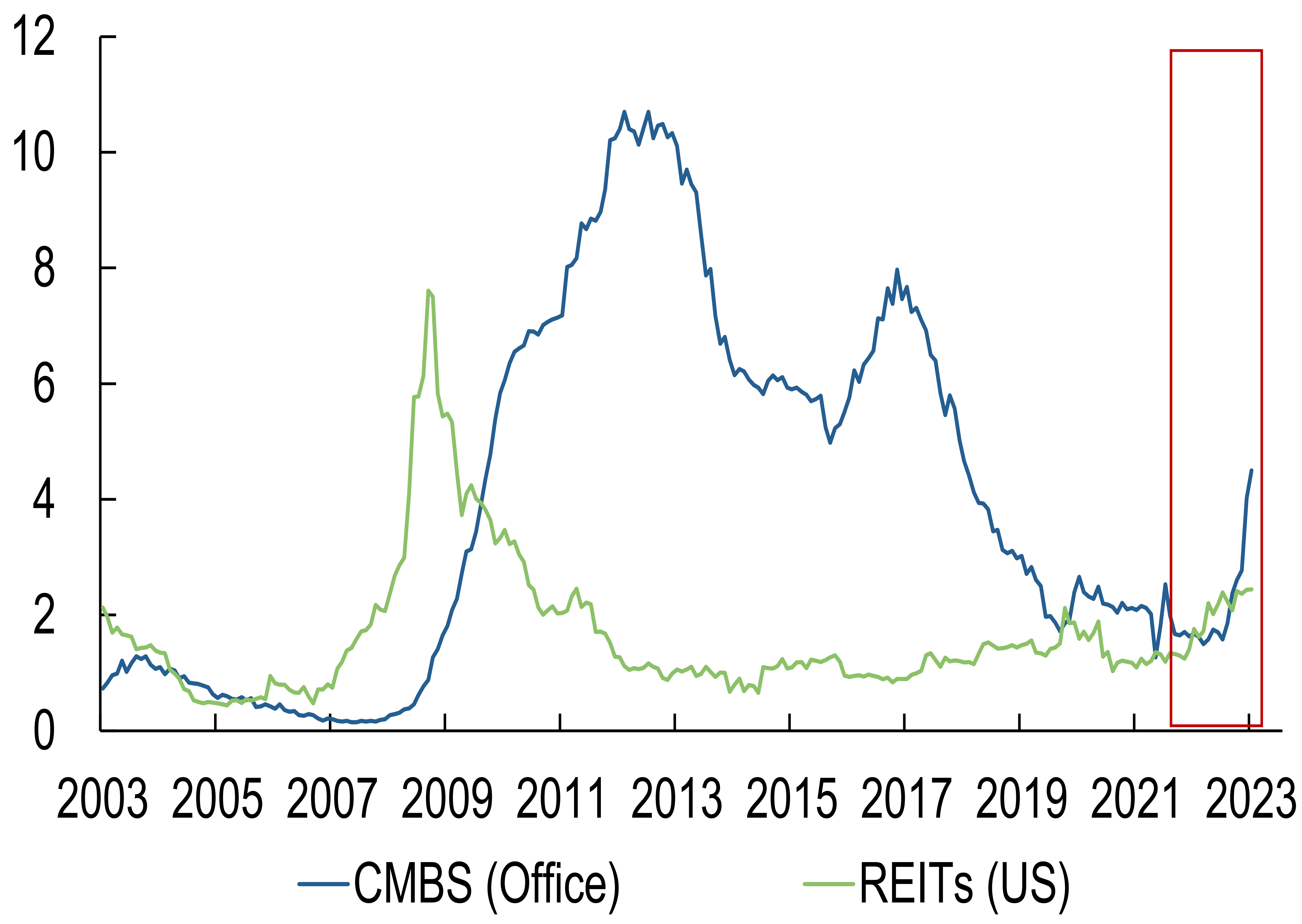
A high interest rate environment has weighed on real house prices

Real House Price Growth By Country
(Year-on-year, percent)



Declining demand and higher borrowing costs increase risk of default of CRE borrowers

One-year Ahead Expected Default Frequency of REITs and CMBS Default Rates
(Percent)



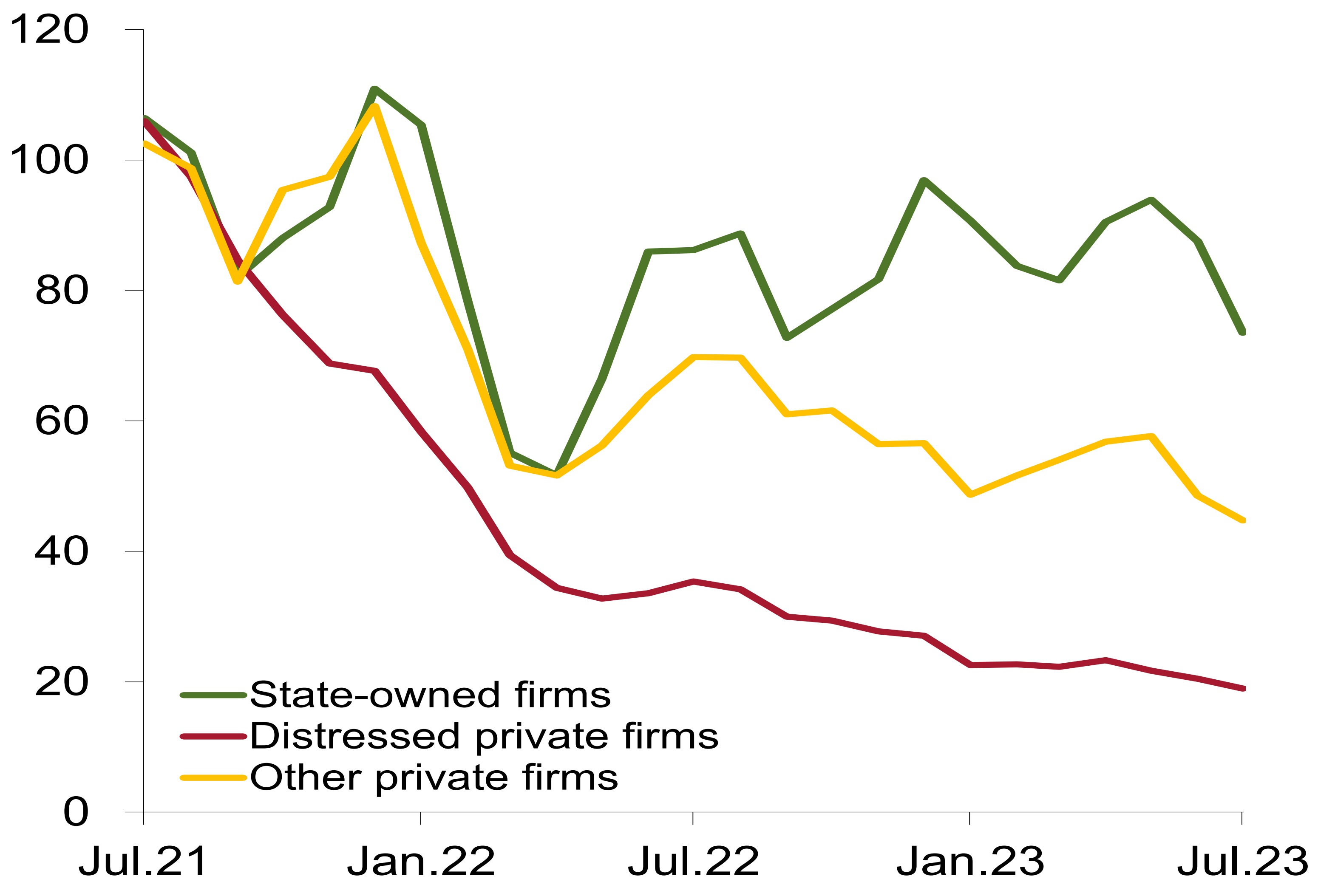
Concerns about financial stability have rattled markets in China

The housing market weakened again with poor sales performance

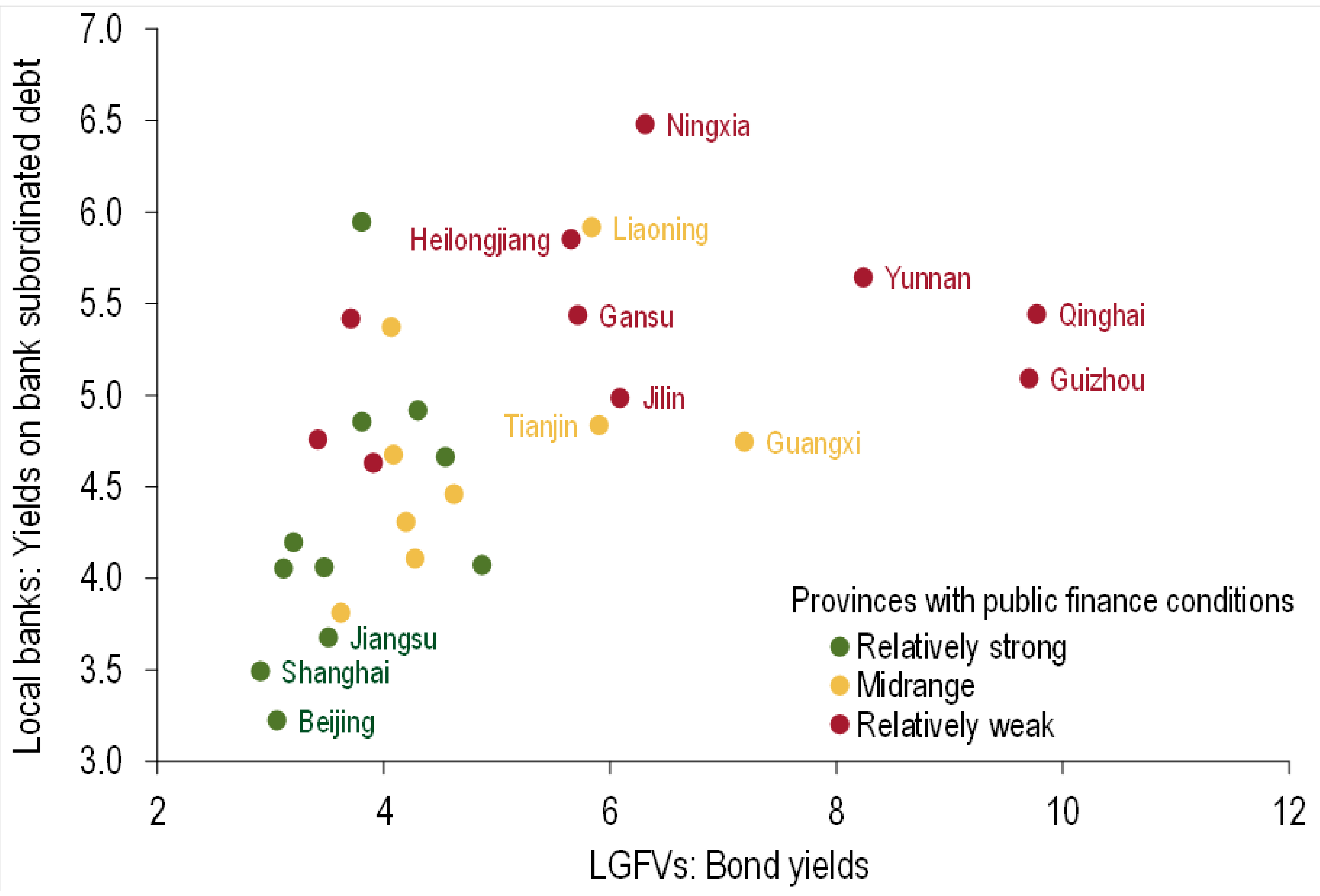
Macro-financial spillovers could be amplified through the banking-sovereign-corporates nexus

The suspension of redemptions by a major asset manager has raised concerns

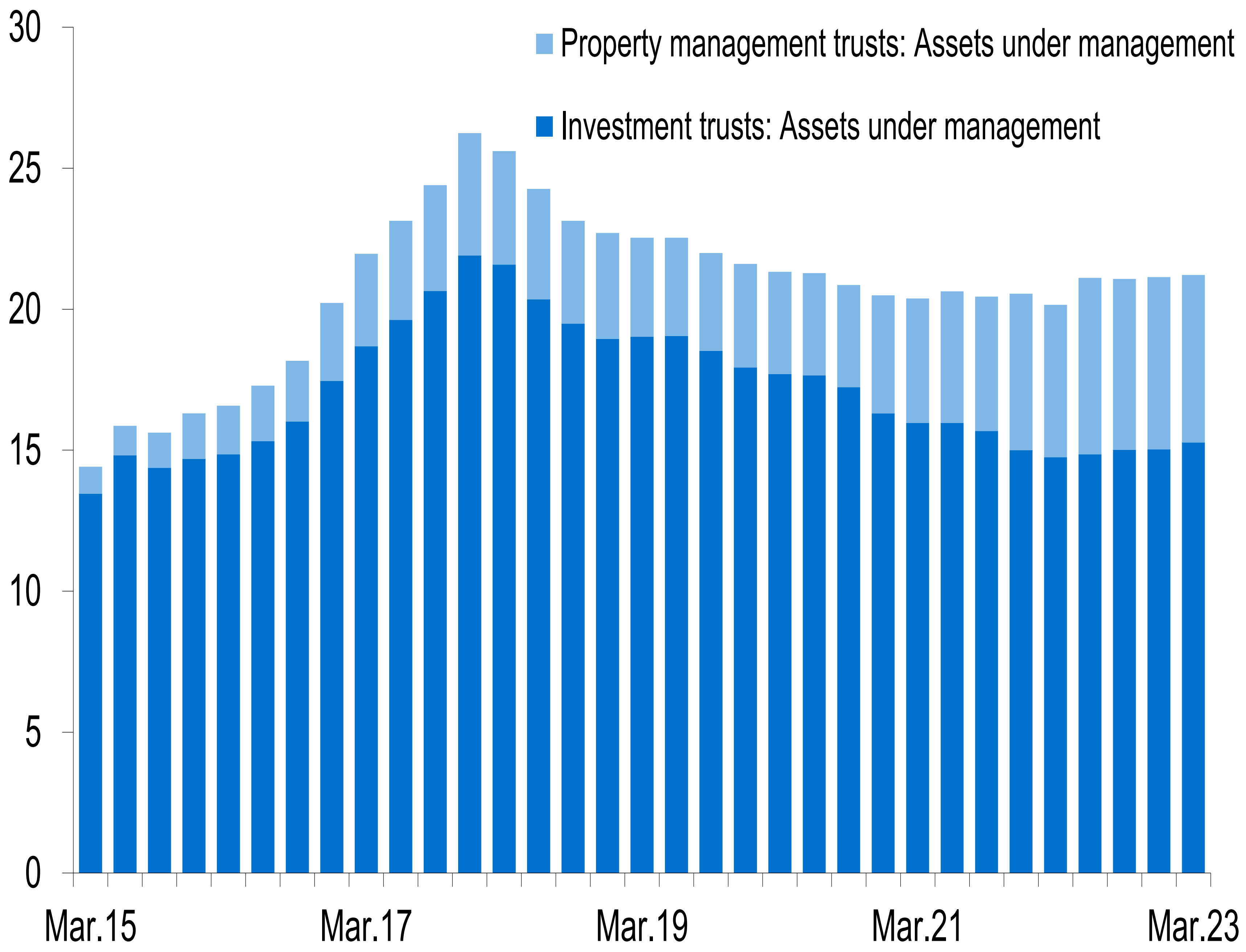
Property Developers' Sales Volumes
(Average of 2021H1 = 100; 3-month moving average)



China's Provinces: Funding Costs of LGFVs and Local Banks, Mid-August 2023
(Percent)



Trust Assets
(Trillions of Renminbi)



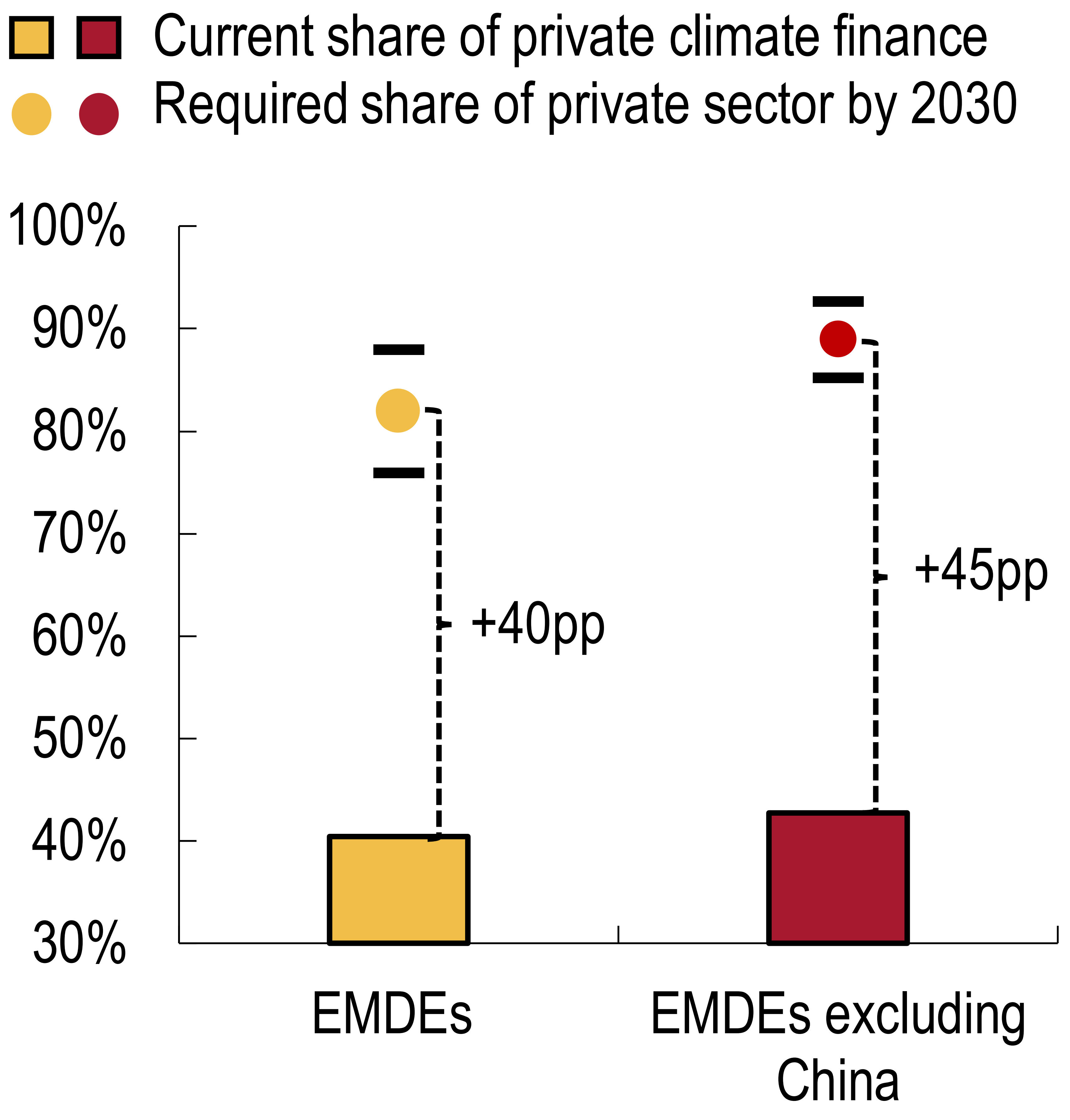
Navigating trade-offs between price stability and financial stability

- Ex post central bank tools can improve trade-offs…
  - liquidity provision
- …but they have shortcomings
  - liquidity vs solvency, NBFIs, political economy, fiscal space
- Macroprudential policy can also help…
  - stronger capital buffers reduce likelihood of stress
- …but can't simply lean on stronger macroprudential leg
  - fiscal space rebuilding, rethink monetary policy actions potentially leading to overheating

A broad policy mix is needed to support climate financing in EMDEs (Chapter 3)

Private capital will have to support a larger share of climate investment needs

Projected Private Financing Share in Climate Investments
(Percent)



The share of funds dedicated to climate impact remains very small

Assets Under Management of Sustainable Investment Funds, by Fund Label
(Billions of US Dollars)