

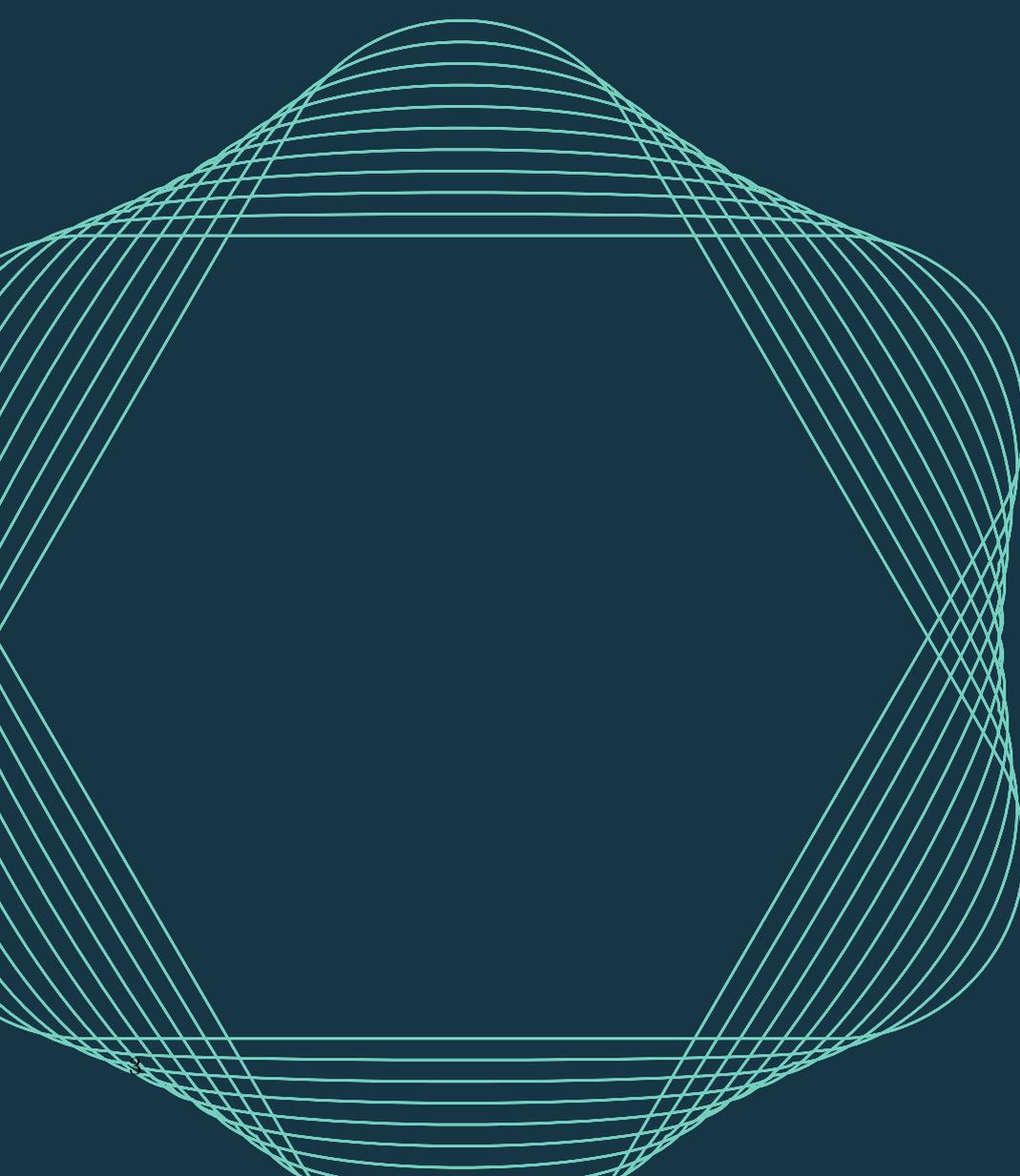
Global Bond Yields: Unravelling the Drivers of Recent Volatility

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Introduction

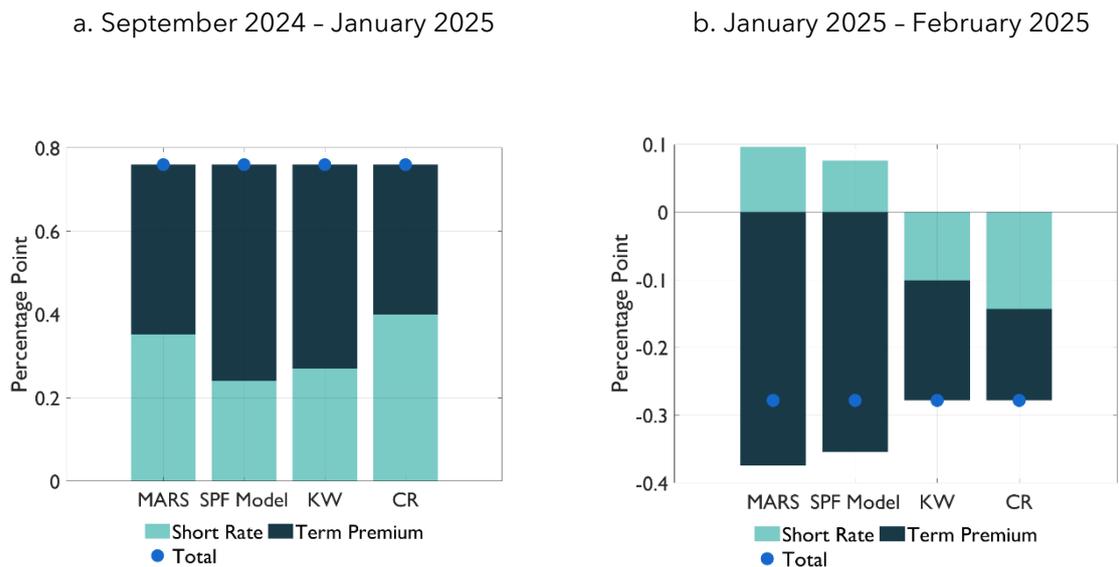
Recent fluctuations in sovereign bond yields have been largely driven by shifts in term premia, the compensation investors require for bearing duration risk, particularly between September 2024 and early 2025. During this period, term premia rose notably, contributing to higher sovereign yields, before roughly half of this increase was unwound. A key question is what these movements signal about the future path of interest rates.

A critical aspect of yield decomposition is distinguishing between expectations of future short-term interest rates and the term premium. This distinction is crucial for interpreting recent yield dynamics and assessing long-term interest rate expectations, which serve as an important benchmark for central bank policy decisions. While international yield movements were largely driven by global factors through the end of 2024, more recent shifts have been

dominated by country-specific developments. For instance, the US has experienced a particularly notable idiosyncratic decline in bond yields since January while German yields have moved in the opposite direction.

Looking beyond short-term fluctuations, several structural forces will likely shape future yield movements. A continued reduction in central bank bond holdings and persistent fiscal deficits, which necessitate increased bond issuance, may push investors to demand higher yields as compensation. These secular trends could take time to be fully reflected in term premium estimates, but they have significant implications for the equilibrium rate environment and monetary policy.

Figure 1: Change in 10-Year US Bond Yield



Source and Notes: Fulcrum Asset Management, LLP. Panel a decomposes changes in the US 10-year treasury yield from 30 September 2024 until 31 January 2025 into components attributable to short term interest rate expectations and term premium respectively. Panel b applies the same decomposition from 31 January 2025 until 28 February 2025. MARS stands for Macro Allocation and Risk System. SPF stands for Survey of Professional Forecasters. KW stands for Kim and Wright (2005). CR stands for Christensen and Rudebusch (2012).

Shorter-Term Yield Moves

Before turning to longer-term secular influences, we first consider further the more recent yield movements in detail.

Bond yields can be decomposed into the expected path of short-term interest rates and the term premia investors demand for taking duration risk. For the 10-year yield, the gap between the observed yield, y_t^{10y} , and the expected rate, $E_t[i_{t+1;t+10}]$, is the term premium, tp_t^{10y} , summarised as:

$$y_t^{10y} = E_t[i_{t+1;t+10}] + tp_t^{10y}$$

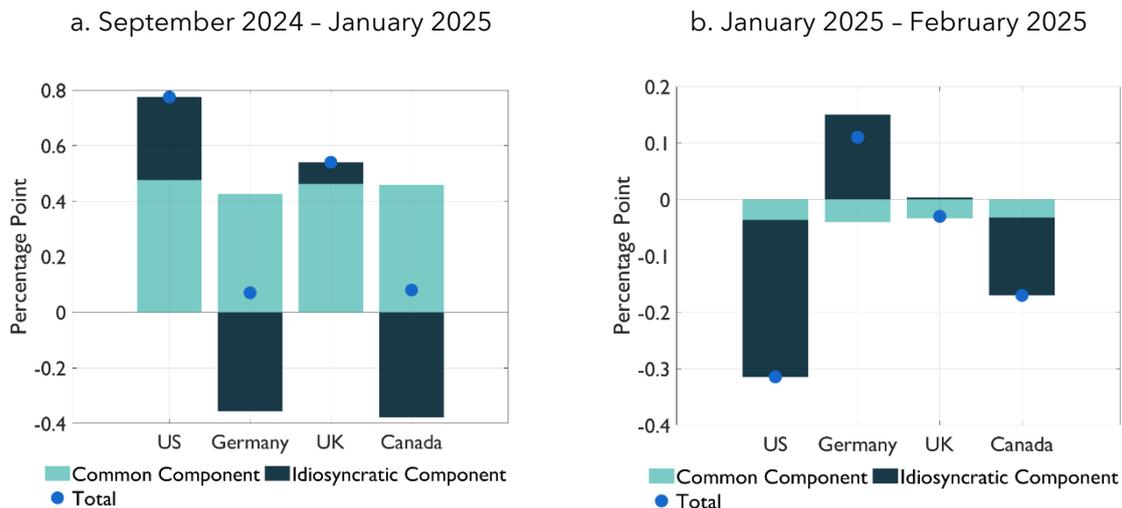
At Fulcrum, we maintain several models of the term premia, which generally agree that the rise in US bond yields from their recent low in September 2024 to their high in January 2025 was driven by both higher expected short-term rates and an increase in term premia (Figure 1a). The approximately 80bps increase in yields is primarily attributed to a rise in term premia across various model estimates. However, the sharp decline in yields in January and February 2025 (Figure 1b), amid weaker economic data and a risk-off sentiment in global markets, is

largely attributed to a reversal of similar magnitude of the earlier increase in term premia.

Different models employ varying estimation techniques, yet their broad conclusions remain consistent across both periods. In our Macro Allocation and Risk System (MARS), the expected short-rate path is derived from a state-space model that incorporates a wide range of global asset prices and macroeconomic aggregates. Our Survey of Professional Forecasters (SPF) model, by contrast, relies on the term structure of interest rates, market inflation expectations, and consensus forecasts for long-term interest rates, inflation, and GDP. Additional models include term structure factor models, such as Kim and Wright (2005) and Christensen and Rudebusch (2012). Despite their methodological differences, these models generally agree that both higher expected short-term interest rates and an increase in term premia have driven long-term yield movements through the turn of the year, with term premia playing the dominant role.

At Fulcrum, we place greater emphasis on the MARS and SPF models, as they explicitly incorporate macroeconomic projections and a

Figure 2: Change in 10-Year Global Bond Yields



Source and Notes: Fulcrum Asset Management, LLP. Panel a shows the decomposition of changes in different countries' 10-year treasury yields from 30 September 2024 until 31 January 2025 using a factor model to extract common and idiosyncratic components across countries. Panel b displays the same decomposition for the later period between 31 January 2025 until 28 February 2025.

broader set of financial asset prices beyond the term structure of interest rates. This provides a more comprehensive framework for assessing bond yield movements. For instance, in Q4 2024, upside surprises in US inflation and GDP growth, along with expectations of a more hawkish Federal Reserve, led both models to increase their assessment of future short-term interest rates. While all models produce similar decompositions for this period, their estimates vary over time. Given their direct linkage to macroeconomic fundamentals, we view our models as valuable tools for real-time analysis of term premia dynamics.

When considering a broader set of international bond yields, we use factor model techniques to distinguish between ‘global’ and ‘idiosyncratic’ (country-specific) influences (Figure 2). Notably, global factors can be significantly shaped by developments in a single country yet still drive predictable co-movements across other markets. For instance, exogenous shocks to US monetary policy have been shown to influence the term structure of global yields (Adrian et al.,

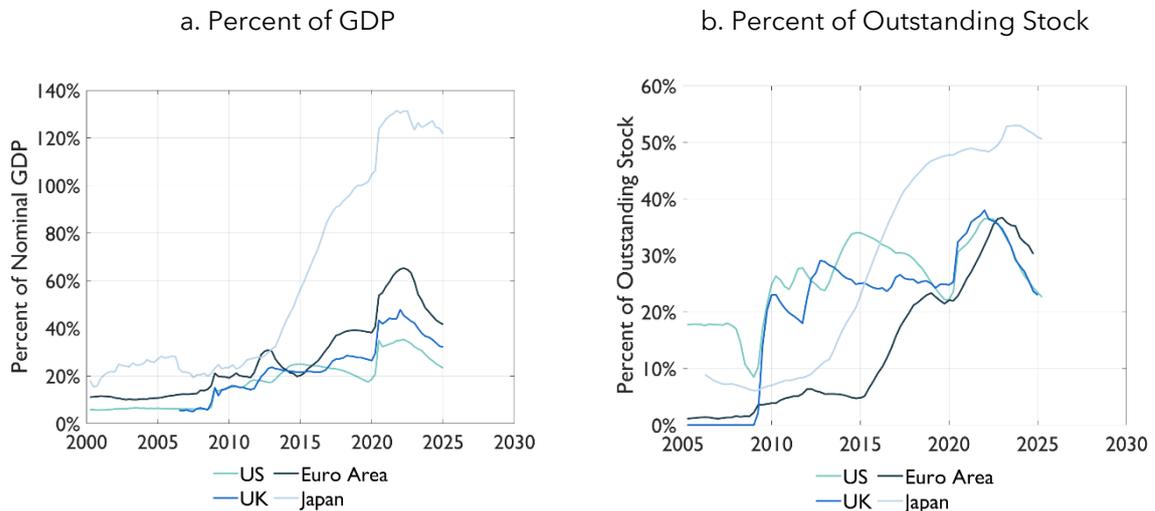
2024). In contrast, idiosyncratic movements, by definition, are uncorrelated across countries and capture domestic shocks that do not spill over into other markets.

From September 2024 to January 2025, ‘global’ factors drove yields higher across the board, with the US and UK experiencing additional upward ‘idiosyncratic’ pressures, while Canada and Germany saw ‘idiosyncratic’ declines (Figure 2a). However, in January and February 2025, US yields saw significant ‘idiosyncratic’ declines amid signs of slowing growth and heightened tariff uncertainty, a trend also exhibited in Canada. In contrast, elevated European inflation and increased defence spending have coincided with an upward ‘idiosyncratic’ shift in German yields (Figure 2b). Meanwhile, UK yields have remained relatively stable since the start of 2025.¹

Longer-Term Shifts in Demand

Stepping back from shorter-term developments, two significant structural shifts in the demand for

Figure 3: Advanced Economy Central Bank Balance Sheets



Source and Notes: Haver and Fulcrum Asset Management LLP. UK line in right hand panel shows only Asset Purchase Facility (APF) holdings, the Bank of England stock held for monetary policy purposes.

¹ A related decomposition shows that recent movements in nominal yields are dominated by changes in real

components, with a less substantial role for changes in inflation breakevens, which have remained ‘‘well anchored’’.

government assets have occurred in recent years. First, the change in monetary policy stance across advanced economies has effectively increased the supply of government assets available to the market. Second, adjustments in foreign holdings, particularly by central banks managing foreign exchange (FX) reserves, have contributed to a decline in demand for traditionally 'safe' government bonds. These developments have implications for bond yields and term premia, as we explore in the following sections.

Central banks

In the aftermath of the COVID-19 recession, a fundamental shift in the demand for bonds across countries has been driven by changes in central bank monetary policies. This shift reflects the transition in their policy focus toward normalising balance sheets as economies reopened and inflation surged.

Following the global financial crisis, the European debt crisis, and later the COVID-19 pandemic, central banks—including the Federal Reserve (Fed), the European Central Bank (ECB), and the Bank of England (BoE)—significantly increased their holdings of government bonds. This expansion pushed balance sheets from around 5% to 10% of GDP (with the euro area slightly higher) to peak levels in 2023 of approximately 35% in the US, 50% in the UK, and 65% in the euro area (Figure 3a). Since then, these central banks have begun a gradual process of reducing their bond holdings, marking a structural shift in bond market supply and demand.

Japan's experience has followed a markedly different trajectory. The Bank of Japan (BoJ) started its large-scale government bond purchases over two decades ago, following the adoption of zero interest rate policies in 2001. By the time of the global financial crisis, the BoJ already had a balance sheet larger than most other central banks, even after their post-crisis expansions. Since 2013, the BoJ's Quantitative and Qualitative Easing (QQE) programme has further accelerated this growth expanding the

balance sheet to levels that exceed Japan's nominal GDP. However, more recently, this expansion has slowed as the BoJ seeks to gradually normalise policy following a sustained rise in inflation.

Overall, these shifts in monetary policy have led to a significant reduction in demand for domestic securities. Central bank holdings have decreased from approximately 35% of the total outstanding stock of bonds in the US and UK (and over 50% in Japan) to around 22% in the most recent readings (Figure 3b).

The influence of balance sheet changes on bond yields and term premium estimates is well-documented, with various studies consistently finding that asset purchases equivalent to 10% of nominal GDP reduce the 10-year US bond yield by approximately 100 basis points (Borio and Zabai, 2016). Of this reduction, just under half can be attributed to the impact on the term premium.² In the euro area the ECB believe the balance sheet is currently reducing term premia by around 75 basis points (Cipollone, 2025). Importantly, however, recent work by Du et al (2024) show the impact of QT to be far smaller than "reverse QE", pointing to an important asymmetry in the normalisation process.

A common theme among central banks is the emphasis on interest rates as the primary tool for implementing monetary policy, emphasising the importance of a gradual and predictable path for balance sheet normalisation to avoid financial market disruptions. Another shared theme is the uncertainty surrounding the optimal size of the balance sheet, with all central banks adopting a "we'll know it when we see it" approach.

Despite these similarities, central banks employ distinct strategies for balance sheet normalisation. The Fed and the ECB predominantly use passive reduction approaches, limiting the reinvestment of principal payments from maturing securities. In contrast, the BoE has taken a more active stance by selling its Gilt holdings. This has led the BoE to place greater emphasis on managing market

² The equivalent impact in other countries is generally somewhat smaller.

Table 1: Current Quantitative Tightening Policies

Central Bank	Structure	Latest Level	Outlined
Federal Reserve <i>Latest: Dec 2024</i>	Rollover cap	Treasury \$25bn per month MBS \$35bn per month	Jan 2022 (Link) May 2022 (Link)
ECB <i>Latest: Jun 2024</i>	Rollover cap	PEPP €0bn per month	Dec 2021(Link)
BoJ <i>Latest: Jul 2024</i>	Tapering	¥400bn JGB taper per quarter	July 2024 (Link)
BoE <i>Latest: Sep 2024</i>	Active reduction	APF £100bn per year	Aug 2022 (Link)

Source and Notes: Fulcrum Asset Management LLP. Stylized summary of central bank quantitative tightening policies. PEPP stands for Pandemic Emergency Purchase Programme. MBS stands for Mortgage-Backed Securities. JGB stands for Japanese Government Bonds. APF stands for Asset Purchase Facility.

disruptions within its policy guidance. Meanwhile, the BoJ continues to purchase government assets, having only scaled back its QE programme rather than reducing its balance sheet. Furthermore, the Fed has signalled its long-term intention to hold only domestic government debt, reinforcing a clear separation from other asset classes. Table 1 summarises these differences, with particular focus on the BoE's proactive sales strategy versus the Fed and ECB's reliance on rollover caps. The following sections offer a detailed analysis of each central bank's most recent policy decisions.

Federal Reserve

The Fed benefits from having previously implemented a Quantitative Tightening (QT) programme, which began in March 2019, with a set of principles dating from September 2014. This programme's organising principles were updated in January 2022 to reflect the subsequent changes and expansions in the Federal Reserve's balance sheet following the COVID-19 pandemic. Both QT mechanisms share similar designs, albeit with different rollover caps.

The Fed manages its balance sheet reduction by setting monthly caps on reinvestments, allowing any maturities above the cap to "roll off" according to the maturity structure of the

holdings. Reinvestments are made in fixed proportions to preserve the existing maturity composition.³ This adjustment highlights the Fed's ongoing evaluation of the appropriate pace for QT within its broader monetary policy objectives. As normalisation progresses, the Fed continues to monitor repo markets for signs of reserve scarcity (Perli, 2024). If reserves become constrained earlier than expected, the Fed may slow or halt balance sheet reductions to maintain financial stability.

European Central Bank

The quantitative tightening policies of the ECB are comparable to the Fed, with an explicit cap on reinvestment. This cap is currently set at €0 billion per month, down from €7.5 billion since the start of 2025. This will result in a natural runoff close to €40 billion per month (Schnabel, 2024). One challenge for the ECB is the variety of different purchase programs still on its balance sheet. Nearly 80% of the ECB's €2.7 trillion balance sheet is held as public sector debt under the Public Sector Purchase Programme (PSPP), with corporate and covered bonds making up a similar portion of the remainder. The ECB's current plan is to gradually reduce its balance sheet. Their recent assessment is that the decline in the balance sheet has not materially impacted bond absorption capacity in the private sector.

³ In theory, these caps can be adjusted at any FOMC meeting, but in practice, changes have been rare. Since the program's launch, the caps have been modified only once:

in May 2024, the FOMC lowered the Treasury securities cap from \$60 billion to \$20 billion per month, aiming to accelerate balance sheet normalisation.

Bank of England

The Bank of England, like the Fed and the ECB, views the current level of excess reserves as adequate. However, it has been actively preparing for the possibility that this assessment may change, which could ultimately bring an end to the balance sheet runoff. The Bank reviews its strategy for reducing its Asset Purchase Facility (APF) annually each September. In a recent speech, Governor Bailey (Bailey, 2024) reiterated earlier remarks (Hauser, 2019) regarding the use of a Preferred Minimum Range of Reserves (PMRR). Market estimates currently place the PMRR between £345 billion and £490 billion, compared to the current excess reserve level of £760 billion. The Bank intends to maintain the current pace of runoff, set at £100 billion for the year, until September 2025.

Foreign Holders

Another notable trend is the decline in the use of assets denominated in traditional reserve currencies by foreign entities, including central

banks, as highlighted by Arslanalp et al. (2024). As foreign central banks diversify their balance sheets to include assets like gold and non-traditional currencies such as the Australian Dollar (AUD), Canadian Dollar (CAD), and Renminbi (RMB), the proportion of their holdings in US Treasuries and other traditional assets has decreased. This shift has accelerated since the US election in November 2024 (Ahmed and Rebucci, 2025), with a significant reduction in foreign official holdings of US Treasuries. Domestic primary dealers have stepped in to absorb the sales by foreign entities, but their ability to do so has been constrained by balance sheet limitations.

The new US administration may pursue regulatory changes that move in the opposite direction. Specifically, its focus on supporting lower long-term yields (Box 1) could be reflected in a reduction of the supplementary leverage ratio applied to US Treasuries and central bank deposits. Currently, regulations require banks to hold additional capital against US government

Box 1. Does the New US Administration Want to Reduce Term Premium?

"Interest rates will dramatically fall. They'll be down very, very low". (President Trump, Economic Club of New York, 5 September 2024).

The Trump administration has expressed a desire for lower interest rates, with a particular focus on reducing mortgage costs for households. They believe this can be achieved through a combination of lower energy prices, fiscal deficits, and sustained, non-inflationary economic growth.

Recently, US Treasury Secretary Scott Bessent clarified on Fox Business (February 5, 2025) that while President Trump does support "lower interest rates," he was specifically referring to the 10-year Treasury yield rather than urging the Federal Reserve to cut short-term rates. This suggests that the administration views the compression of the term premium as an important economic goal, as well as a benchmark for assessing the success of its broader policy agenda, which includes deregulation, tax cuts, economic growth, and lower energy costs.

Some analysts have speculated that this focus on term premium compression could be linked to the objectives of a US Sovereign Wealth Fund (SWF). In February, President Trump signed an Executive Order directing the creation of a SWF within 90 days. This fund is expected to prioritise intergenerational savings and strategic investments in key domestic policy areas such as national infrastructure, manufacturing, defence, and medical research.

However, unlike traditional SWFs that are funded by budget or current account surpluses, the US does not currently have these available. As a result, the administration may explore alternative funding streams, such as tariff revenues or the monetisation of government assets, including gold reserves. Despite these possibilities, concerns remain about the economic implications and political motivations behind establishing a US Sovereign Wealth Fund.

debt. A relaxation of this requirement would likely boost demand for US Treasuries and help support lower yields.

Longer-Term Shifts in Supply

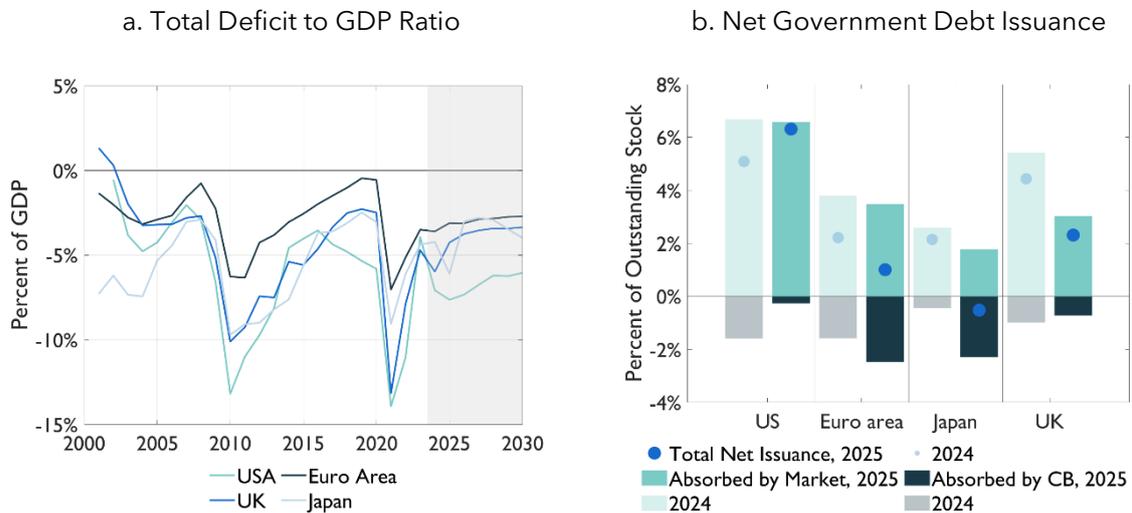
Sovereign debt markets have also been influenced by secular changes in supply. The overall supply of government debt is ultimately driven by cumulative fiscal deficits. Although these deficits have significantly decreased from their peak during the COVID-19 pandemic, they remain elevated and show no signs of returning to pre-pandemic levels, according to the latest IMF projections (see Figure 4a). In FY 2024, fiscal deficits in the US, Japan, and the UK are expected to widen compared to FY 2023, and close only slowly thereafter, while the euro area is the only major region expected to experience a slight reduction.⁴ As a result, the total outstanding stock of government debt is projected to rise modestly across these

economies. Japan stands out as an exception, with government debt expected to reach 250% of GDP—an exceptionally high level that has persisted for years.

Given that the supply of new debt is expected to continue for the foreseeable future, another crucial factor is the maturity structure of issued debt and the timing of issuance. Several debt management offices have indicated that their issuance term structures will remain largely unchanged in 2025. In the US, the issuance profile is currently skewed toward shorter-term maturities.⁵

In the near term, market expectations are for total net issuance and maturities to remain similar through 2025 (Figure 4b). In the US, gross issuance is projected to reach \$4.4 trillion in 2025, with \$1.9 trillion in net issuance—slightly below the levels seen in 2024. However, the amount of issuance absorption required by the market is expected to remain similar, given the anticipated lower level of quantitative tightening

Figure 4: Government Budget and Issuance Projections



Source and Notes: Fulcrum Asset Management, LLP, JPMorgan, and IMF October 2024 World Economic Outlook. Shaded bars in panel a represent IMF forecast dates. Panel b shows issuance projections across regions for 2025. CB stands for central bank.

⁴ That said, the anticipated post-election German fiscal expansion will materially increase euro area deficits, as will the recent loosening of EU fiscal sustainability rules to exclude additional defence spending.

⁵ See US Quarterly Refinancing Statement ([Link](#)).

(QT) in 2025. This trend is also expected in the euro area, Japan, and the UK. By combining stable issuance with a reduction in domestic absorption by central banks, market absorption will increase (Figure 4b). While this increase will be gradual, the overall level has risen in recent years (Figure 5). Over the past few years, QT policies have steadily increased the amount of issuance that the market needs to absorb.

Conclusion

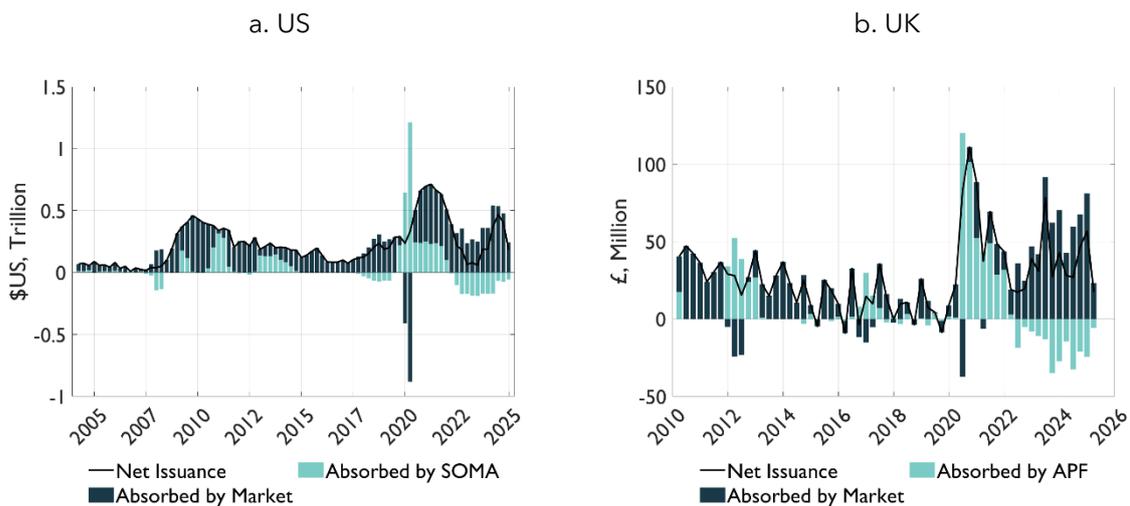
By systematically decomposing yield movements in real time, we gain valuable insight into the interplay between policy expectations and term premia. The sharp rise in bond yields through early 2025 was driven by both increasing rate expectations and higher term premia, while the subsequent decline has primarily reflected an unwinding of the latter. Whether this downward adjustment proves persistent remains an open question.

Looking ahead, two key forces will shape the term structure of interest rates. First, ongoing balance sheet reductions by major central banks are expected to exert gradual upward pressure on bond yields and term premia as the private sector absorbs a larger share of government

debt issuance. While this effect will likely be more muted than the compression seen during quantitative easing, its long-run impact on yields should not be overlooked. Second, the interaction between global and domestic yield components will continue to influence the effectiveness of individual central bank policies. If global factors—such as shifts in US monetary policy—remain dominant, monetary policy independence elsewhere may be constrained. Conversely, if idiosyncratic factors take precedence, we could see greater divergence in policy stances across economies.

These dynamics underscore why an in-depth decomposition of bond yields is more than an academic exercise—it is a critical tool for both investors and policymakers. Employing a combination of external term-structure models and internal macroeconomic frameworks allows for a more precise breakdown of interest rate expectations and term premia, while factor models help distinguish global drivers from country-specific influences. As central banks navigate the future trajectory of their balance sheets amid persistent fiscal deficits, understanding these forces will be essential for anticipating market expectations and assessing central bank reaction functions.

Figure 5: Net Issuance Absorption



Source and Notes: Haver and Fulcrum Asset Management LLP. SOMA stands for System Open Market Account Holdings. APF stands for the Asset Purchase Facility.

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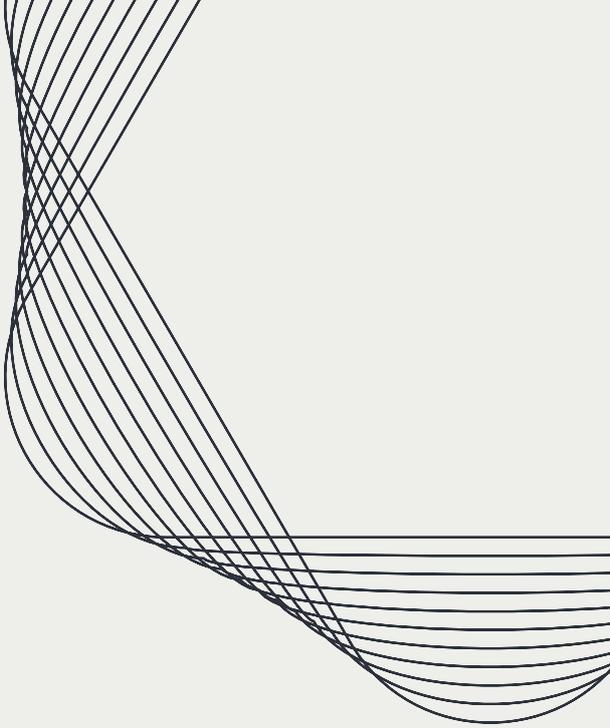
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