National Institute of Economic and Social Research

NIESR Quarterly Term Premium Tracker

Bond Market Investors Regain Confidence in Q4 as Central Banks Begin to Steady the Pace of Policy Normalisation

Paula Bejarano Carbo and Joanna Nowinska

"UK 10-year gilt yields have stabilised on an upwards trend, driven by increasing short-term interest rate expectations. Our term premium estimates for the fourth quarter of this year suggest that, after a month of turbulent market conditions caused by the Truss government's 'mini-budget', investors began to regain confidence in the path of short-term rates following the MPC's meeting on 3 November. That said, policy normalisation represents a significant regime change; if rates are to rise by as much and as quickly as is currently implied by markets, there may well be further turbulence in the coming year."

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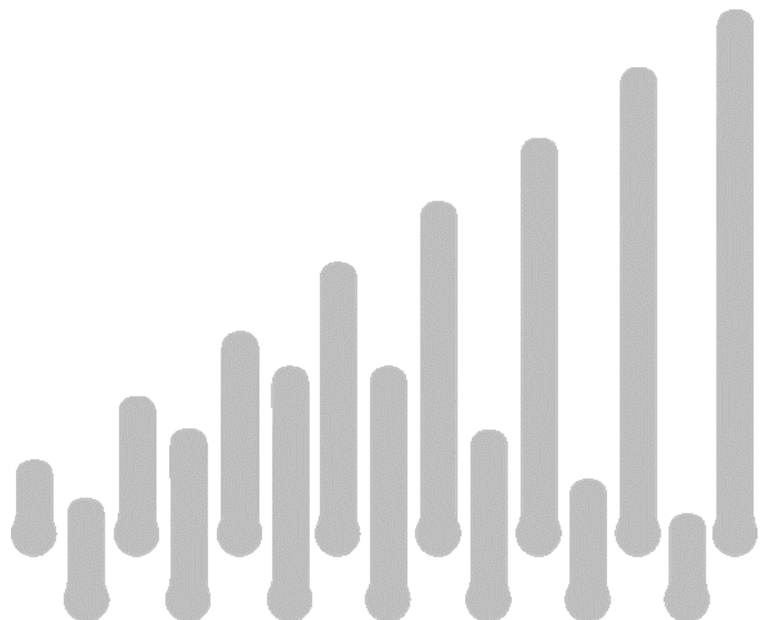
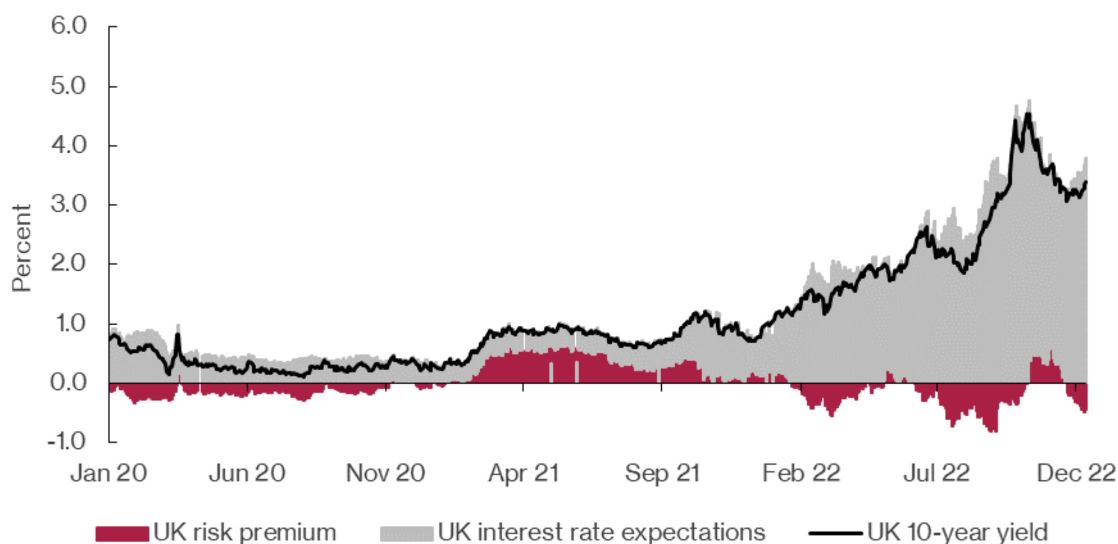


Figure 1 – UK 10-year government bond yield and decomposition by average current and expected future short-term interest rates and risk premium (per cent)



Source: Authors' calculations based on Bank of England data

Main Points:

- The 10-year UK government bond (gilt) yield has been on an upwards trend over the year as a result of monetary policy tightening in response to the ongoing inflation shock. The gilt yield has stabilised in line with this trend following the volatility caused by the Truss government's 'mini-budget'.

- The term premium on UK gilt yields rose steeply in the aftermath September's fiscal event but peaked this year on 3 November, when the Bank of England hiked its policy rate by 75 basis points and forecast a two-year long recession in the UK. It has been decreasing since, signalling renewed investor confidence in the path of interest rates. The recent upward path of gilt yields is driven by short-term interest rate expectations.

- Last week, policymakers at the Bank of England, Federal Reserve (Fed) and European Central Bank (ECB) all opted for a policy rate hike of 50 basis points, further cementing expectations of increasing short-term interest rates, though indicating a slowing in the pace of increases. All three central banks hinted at further interest rate rises over the coming months given that inflationary pressures remain persistent.

- Despite the ECB recently tightening monetary policy in concert with the Bank and the Fed, in contrast to those central banks it is facing an increasingly fragmented environment, resulting both from high inflation and term premia dispersion among euro-area countries. In bond markets, Italy and Greece continue to decouple from trend, with our latest term premia estimates nearly 1 and 1.75 percentage points higher than the euro-area average, respectively. While this pales in comparison to post-Financial Crisis fragmentation, it still presents an important risk to financial stability and the transmission of monetary policy.

UK Term Premium

Since our last term premium tracker published in September, the 10-year UK government bond yield has seen significant volatility as a result of the Truss government's mini budget, but has now stabilised on its previous upwards trend (Figure 1). In this Tracker, we decompose long-term bond yields into two components: expectations of the future path of short-term interest rates and a term premium. The term (or risk) premium is the compensation investors require for bearing the risk that short-term bond yields will not evolve as expected.

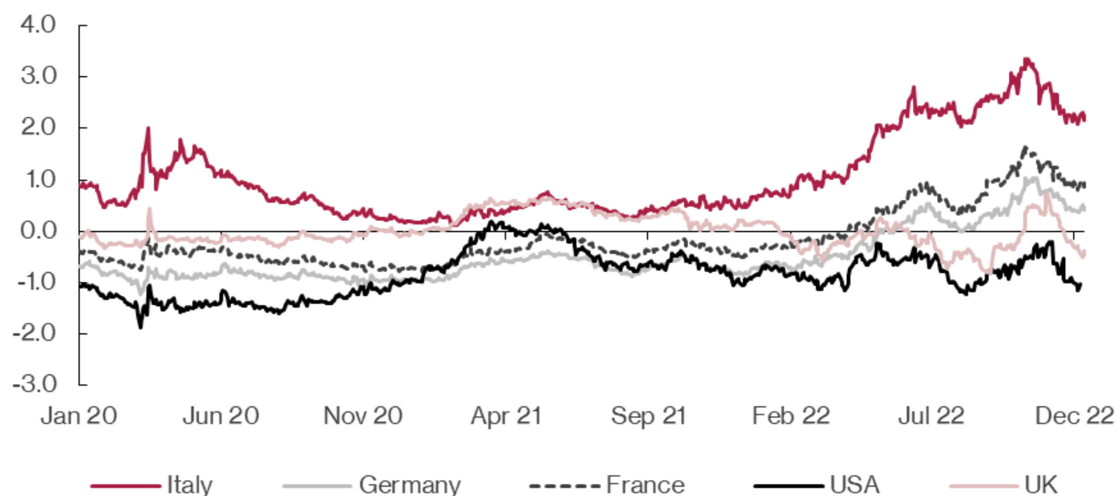
Increasing bond yields in the UK in the past year have been driven by short-term interest rate expectations. The Bank of England's MPC meetings in November and December stressed that inflation pressures remain elevated, likely warranting further increases in interest rates to return inflation to the 2 per cent target. Despite a fall in the headline CPI rate in November to 10.7 per cent, measures of 'core' inflation remain elevated; for instance, NIESR's measure of trimmed-mean inflation in the same month rose to a series high of 9 per cent, suggesting that inflationary pressures remain persistent and broad-based. December's decision to raise the Bank Rate by 50 basis points to 3.5 per cent has left financial markets expecting additional interest rate rises in the coming months, conditional on future inflation developments. Further, the start of the Bank's quantitative tightening programme in November has likely contributed to consolidating expectations around a general upwards trend in 10-year gilt yields. That said, the reversal of the 'mini-budget' lowered investors' expectations of the path of short-term interest rates relative to our previous tracker, as the Bank's estimates of market-implied policy rate expectations are now peaking at 4.7 per cent in late 2023 in contrast to 6 per cent.

At the same time, the corresponding term premium on UK 10-year government bond yields has decreased steadily over the fourth quarter of this year, after experiencing exceptional volatility from the end of September until mid-November due to September's fiscal event. The recent stabilisation of the term premium indicates that what we witnessed earlier this quarter was symptomatic of temporary market adjustment (in a potentially speculative way) to domestic political and economic events, rather than fundamental falls in confidence. Currently, the UK term premium signals that investors are feeling certain about the path of short-term interest rates. Indeed, the term premium has been on a decline since its peak this year on 3 November, when the Bank of England hiked its policy rate by 75 basis points and forecast a two-year long recession in the UK; further, this risk premium fell back into negative territory in the week after the Chancellor's Autumn Statement. It is possible these monetary and fiscal events were sufficient to establish stability in markets, even under the present low growth-high inflation economic outlook.

US Term Premium

Given the global integration of financial markets, a significant share of the movements observed at the longer end of the yield curve reflect changes in international risk and uncertainty, as well as monetary policy developments abroad. The co-movements in the UK and the US are particularly suggestive of spillovers (Figure 2).

Figure 2 – 10-year term premium estimates across countries (percentage points)



Source: Authors' calculations based on data by Bank of England

Short-term interest rate expectations continue to drive the upwards trend in the 10-year US Treasury yield. In November 2022, the 12-month US CPI inflation rate dipped slightly to 7.1 per cent. US inflation expectations, as measured by the 10-year breakeven inflation rate, have been decreasing over the last few months, currently standing at just over 2 per cent, not much above the historical average. The Federal Reserve's measure of underlying inflation has been decreasing since its peak of 7.3 per cent in September of this year, reaching 6.6 per cent in November, the latest data point. Despite these welcome falls in inflation indicators, it is important to remember that inflation remains persistently above target; the FOMC has thus continued to respond to the inflationary environment by raising interest rates by a further 50 basis points in December. It further provided identical guidance in its December statement as it has been providing since August, where it anticipated "that ongoing increases in the target range will be appropriate" and noted a continued commitment to pursue QT, leaving little room for doubt regarding the short-term path of US interest rates (Figure 3).

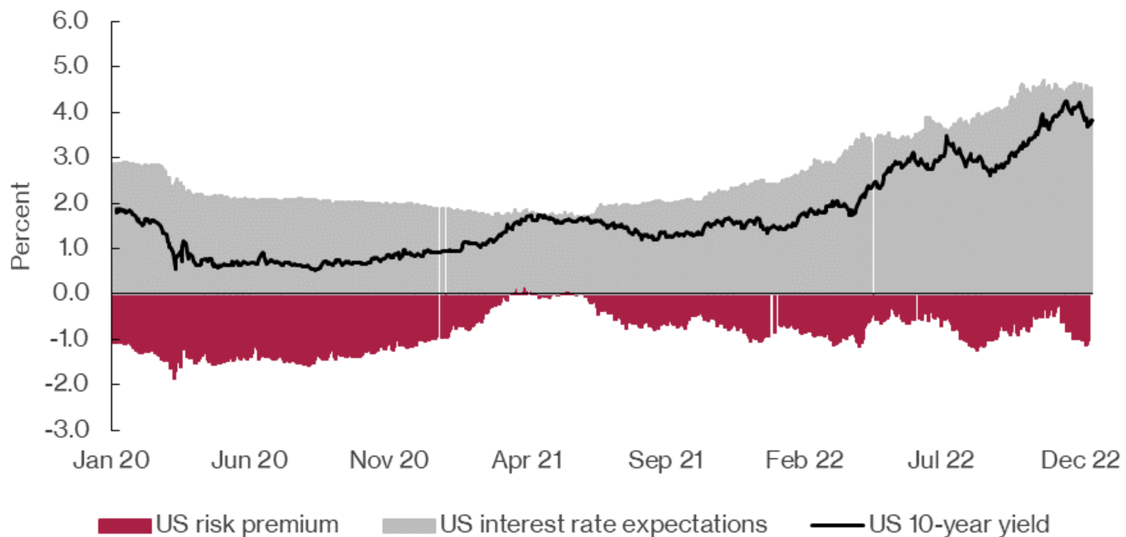
Euro-area Countries' Term Premia

European countries' 10-year bond yields remain on an upwards trend, driven by interest rate expectations. According to Eurostat estimates, annual CPI inflation in the euro-area decreased from 10.6 per cent in October to 10.1 per cent in November. The Governing Council's December decision to tighten policy by a further 50 points, as well as an anticipation that they

"expect to raise them further (...) at a steady pace" has no doubt consolidated the upwards trajectory in short-term interest rate expectations driving this trend in bond yields (Figure 4). As discussed in our recent Global Economic Outlook, the ECB faces a difficult path ahead in pursuing such tightening. In particular, energy prices and the war in Ukraine have dramatically increased the dispersion of inflation rates among euro-area countries; as a result, the ECB walks a fine line in tackling heterogenous rates of inflation while not exacerbating heterogeneous exposures to recession.

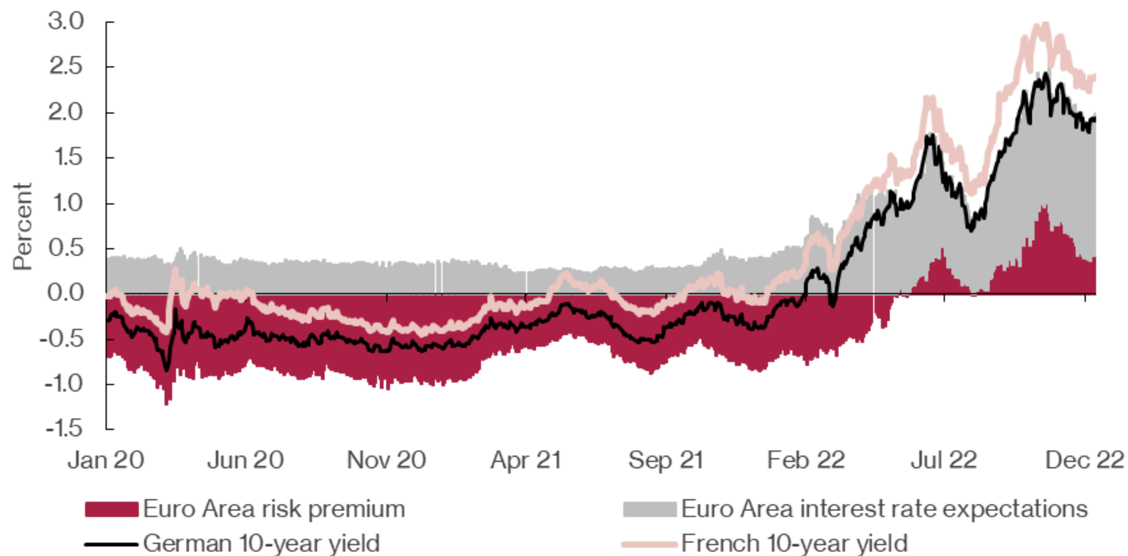
Interestingly, average term premia in the euro-area have fallen since September, though they do remain elevated in comparison to the UK and US. That said, bond market fragmentation remains an issue in the euro-area. In particular, Italy and Greece continue to decouple from trend, with our latest term premia estimates at nearly 1 and 1.75 percentage points higher than the euro-area average, respectively. While this pales in comparison to post-Financial Crisis fragmentation, it still presents an important risk to financial stability and the transmission of monetary policy. Though diverging term premia alone do not necessarily signal the start of a new liquidity crisis, coupled with market fragmentation or possibly speculative dynamics, the threats to financial stability certainly increase. The ECB's November Financial Stability Review notes that euro-area bond markets continue to show limited signs of these divergent dynamics. Whether the Transmission Protection Instrument and Next Generation EU package will be effective in maintaining sufficient financial stability will become clearer over the medium-term.

Figure 3 – US 10-year government bond yield and decomposition by average current and expected future short-term interest rates and risk premium (per cent)



Source: Authors' calculations based on data by FRED database at the Federal Reserve Bank of St. Louis

Figure 4 – Euro-area 10-year government bond yield and decomposition by average current and expected future short-term interest rates and risk premium (per cent)



Source: Authors' calculations based on data by Datastream

Background

The model we employ enables the decomposition of long-term bond yields into two components: expectations of the future path of short-term bond yields, and a term premium. These are, respectively, the average current and expected future short-term interest rates, and the compensation investors require for bearing the risk that short-term bond yields will not evolve as expected.

The National Institute Term Premium Tracker aims to provide quarterly updates of our term premia estimates for the UK, the US and selected European countries based on current daily zero-coupon bond yield data. The term premia estimates at the 10-year maturity and the expected average short-term rates for the same maturity are based on daily yield data from 1961 to 2022. The analysis is based on a five-factor, no-arbitrage term structure model, described in Adrian et al. (2013; 2014). The estimates we obtain for the US are consistent with those produced by the Federal Reserve Bank of New York.

Our approach makes no assumptions on the structural macro-financial relations in the economy, thus not imposing any long-run equilibrium conditions for either employment or inflation (see also Macchiarelli, 2020; 2021).

Data

Daily nominal bond yields for the UK are obtained from the Bank of England https://www.bankofengland.co.uk/statistics/yield-curves

Benchmark bond redemption yields for European countries and the US are obtained from Datastream. Nominal bond yields for the US are obtained from FRED-Federal Reserve Bank of St. Louis Economic Database https://fred.stlouisfed.org/series/DGS10

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