National Institute of Economic and Social Research

NIESR Quarterly Term Premium Tracker

Investors' Confidence Narrows As Markets Adjust To Last Week's Monetary And Fiscal Events

Paula Bejarano Carbo and Corrado Macchiarelli
September 2022

"UK 10-year gilt yields have reached a series high since the pandemic, mainly driven by short-term interest rate expectations. Importantly, our latest figures indicate a rise in the associated term premium, likely resulting from the uncertainty caused by last week's fiscal event. Given the intensity of inflationary pressure in the economy, the Bank of England's upcoming quantitative tightening programme and the short-term nature of the mini budget's firepower, it is likely that these indicators have not yet peaked."

Paula Bejarano Carbo

Data Analyst, NIESR

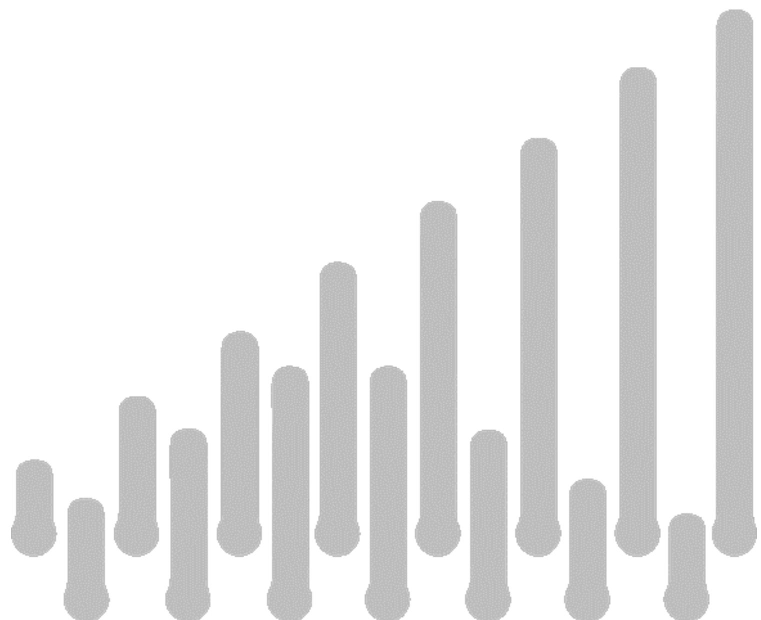
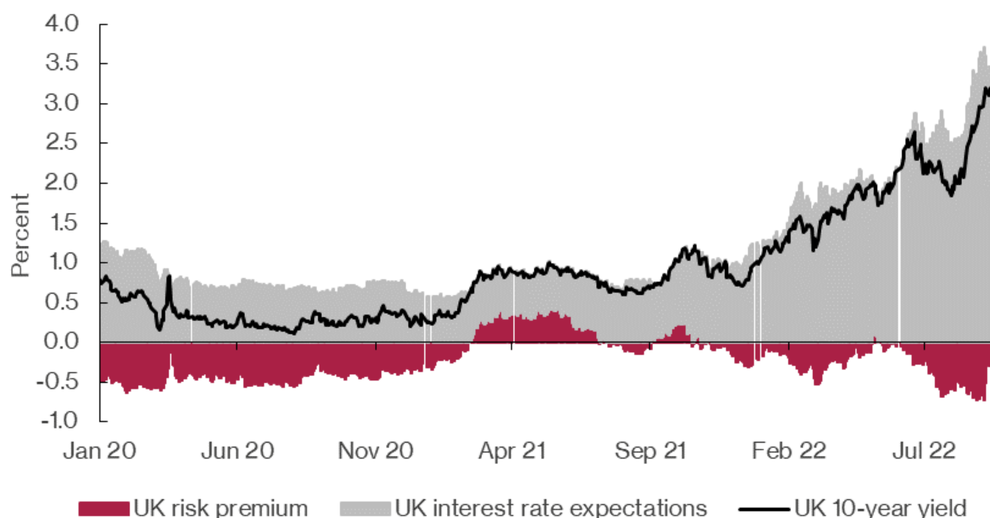


Figure 1 – UK 10-year government bond and decomposition by average current and expected future short-term interest rates and risk premium (per cent)



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

Main Points:

- The 10-year UK government bond (gilt) yield has been on an upwards trend since January as a result of monetary policy tightening in response to inflationary pressure, caused both by supply chain disruptions and the war in Ukraine. Last week's monetary and fiscal policy events have cemented this upwards trend: both the Monetary Policy Committee's (MPC) decision to raise the Bank Rate by a further 50 basis points and commence quantitative tightening, and the expected medium-term inflationary consequences of fiscal loosening have increased market expectations of the path of short-term interest rates. Additionally, the uncertainty generated - in particular by the fiscal event - has led to a rise in the term premium on 10-year gilts, mirroring the global trend which had not previously affected UK investors this year.

- US 10-year Treasury yields remain above 3 per cent. Interest rate expectations continue to increase as the latest FOMC meeting on 20-21 September resulted in a third consecutive rate hike of 75 basis points as the Federal Reserve (Fed) pledged to get inflation back to target.

- German 10-year Bund yields have been increasing as well, a result of the ECB discontinuing its non-standard asset purchases as of July. Euro-area interest rate expectations continued to grow, driven by the September Governing Council decision to raise euro-area policy rates by a further 75 basis points and the rise in inflation to 5.4 per cent in July, far above the European Central Bank's target. Despite the announcement of the ECB's new anti-fragmentation tool, the Transmission Protection Mechanism, bond yields in Italy have continued to de-couple, mainly driven by the uncertainty surrounding the future fiscal stance and recent political events.

Commentary:

We decompose long-term bond yields into two components: expectations of the future path of short-term bond yields 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. Since our previous bond premium tracker in June, inflationary pressures and recession risks have materialised. Thus, the observed higher bond yields in the UK are consistent with such a low growth-high inflation outlook.

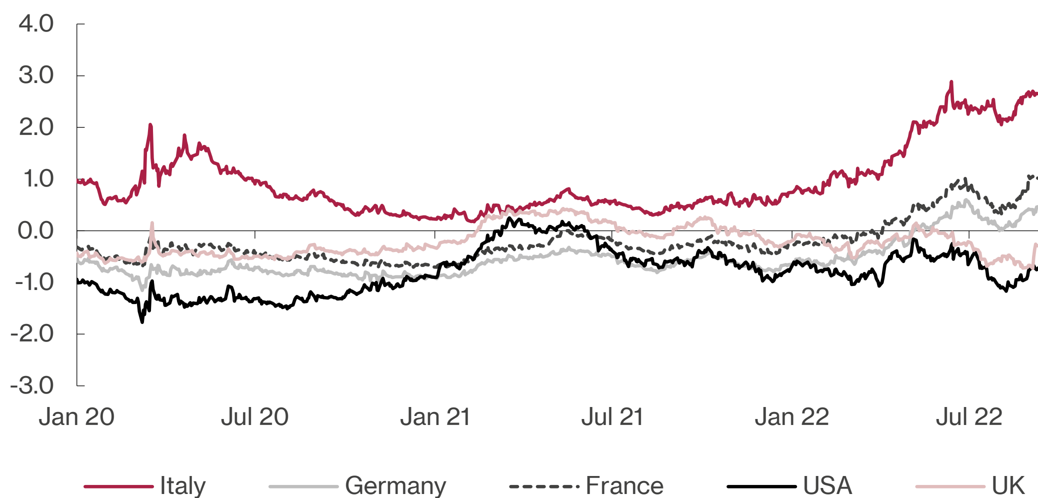
The Bank of England's MPC meetings in August and September highlighted that inflation pressures are likely to persist. The latest MPC decision to bring the Bank Rate to 2.25 per cent has left financial markets expecting additional interest rate rises in the coming months, conditional on future inflation developments. Additionally, as noted in our analysis of last week's mini budget, though fiscal loosening is likely to shorten the current economic downturn and mitigate this year's expected peak inflation levels via the energy price guarantee, the demand boom it will generate will exacerbate ongoing inflationary pressures in the medium run. The fiscal event also generated a further depreciation of sterling, likely contributing to expectations of rising rates over the coming months. Indeed, the Bank's estimates of market-implied policy rate expectations have risen since August, now peaking at a little over 6 per cent in mid-2023 in contrast to the previously expected peak of 3 per cent. Last week's confirmation that gilt sales will take place as of October, with the Bank of England reducing its balance sheet by £80 billion over the next year, further consolidates this upwards trend in 10-year gilt yields.

At the same time, the corresponding term premium for UK 10-year government bond yields has risen quickly in September after having fallen to its lowest level since the pandemic at the end of August. Overall, the negative term premium is symptomatic of a low growth-high inflation scenario as the result of the war. Based on our latest GDP growth tracker, June's headline 0.2 per cent growth in GDP was driven by an unexpected rise in consumer-facing services; nonetheless, we continue to believe the economy remains in recession and forecast the UK economy to contract by 0.1 per cent in the third quarter of this year. The UK's headline inflation rate fell slightly from 10.1 in July to 9.9 per cent in August due to lower-than-expected fuel prices. As noted in our latest CPI tracker, while this fall represents positive news for the UK economy, our measure of underlying inflation – which excludes extreme price movements – increased to a series high of 7.8 per cent, indicating that the surge in inflationary pressure is far from over and we expect annual CPI inflation to peak at around 11.5 per cent in the first quarter of 2023. While still in negative territory, the latest term premium increase suggests that September's developments in the UK economic and political landscape have introduced market uncertainty that was previously absent this year. This is further seen from the latest plunge in sterling prompted by last week's fiscal event. Whether this increasing term premium is a temporary result of market adjustment or symptomatic of general (and indeed, global) heightened uncertainty and plummeting confidence will become clearer over the coming months.

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 from the US to the UK and globally (figure 2).

In July 2022, the 12-month US CPI inflation rate dipped slightly to 8.3 per cent. US inflation expectations, as measured by the 10-year breakeven inflation rate, have fluctuated around 2.5 per cent since June, not much above the historical average. Nonetheless, the Federal Reserve's measure of underlying inflation rose to a series high of 7.2 per cent. The FOMC has continued to respond to the inflationary environment by raising interest rates by a further 75 basis points. It further provided identical guidance in its August and September statements, 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.

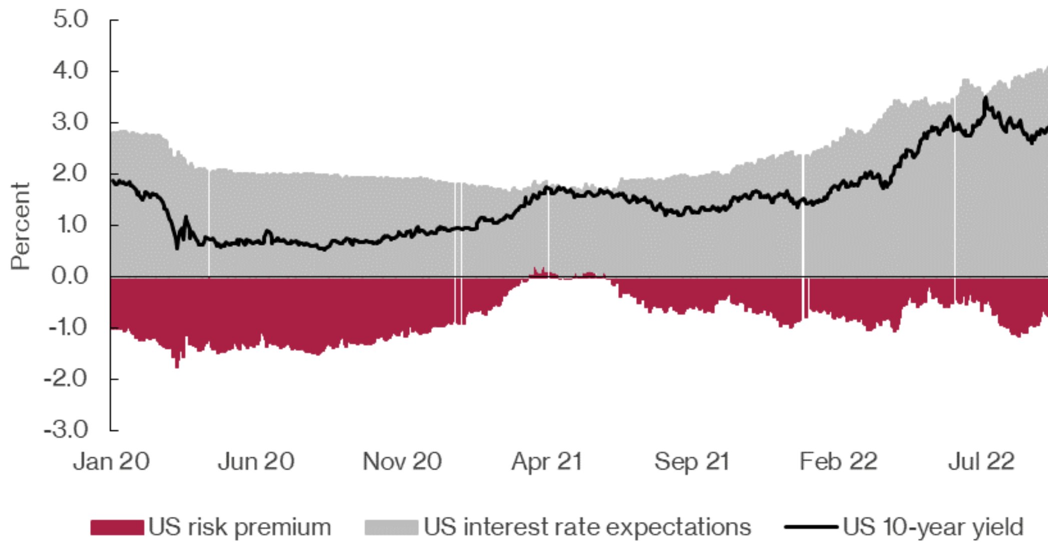
Figure 2 – 10-year term premium estimates across countries (percentage points)



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

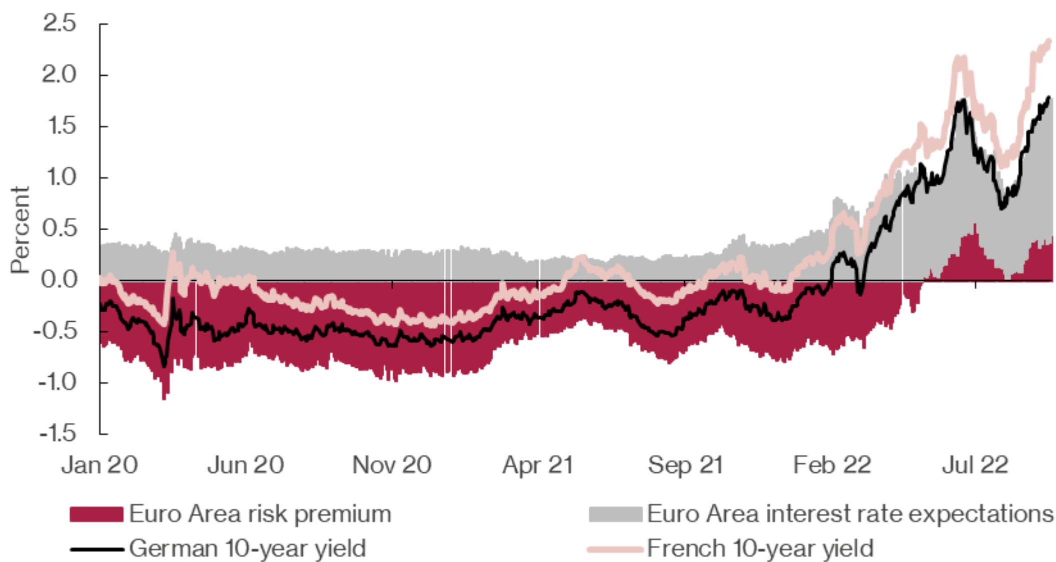
European countries' risk premia remain on an upwards trend. According to Eurostat estimates, consumer price inflation in the Euro Area increased to 8.9 per cent year-on-year in July 2022 with energy continuing to record the biggest price increase. Alongside an end to ECB asset purchases in July, the September decision to tilt towards a more aggressive tightening has no doubt led to an increase in short-term interest rate expectations. Despite the ECB announcement of its Transmission Protection Mechanism in July to prevent financial markets' fragmentation as monetary policy is normalised, risk premia in Italy continued their de-coupling following last week's election result. Moody's noted that its public debt was "vulnerable to negative growth, funding cost and inflation developments," stoking fear of the threat of another liquidity crisis.

Figure 3 – US 10-year government bond 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 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 January 1961 to September 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

References

Macchiarelli Corrado (2020), Government bond term premia during the pandemic, *National Institute Economic Review*, No. 254, November

National Institute of Economic and Social Research, Term Premium Tracker

Adrian Tobias, Richard Crump, Benjamin Mills, and Emanuel Moench (2014), Treasury Term Premia: 1961-Present, *Liberty Street Economics*, May 12.

Adrian Tobias, Richard K. Crump, and Emanuel Moench (2013), Pricing the Term Structure with Linear Regressions, *Journal of Financial Economics* 110, no. 1 October: 110-38

Notes for editors: For further information please contact the NIESR Press Office: press@niesr.ac.uk or Luca Pieri on 020 7654 1954 / l.pieri@niesr.ac.uk

National Institute of Economic and Social Research
2 Dean Trench Street
Smith Square
London, SW1P 3HE
United Kingdom

Switchboard Telephone Number: 020 7222 7665
Website: http://www.niesr.ac.uk