National Institute of Economic and Social Research

NIESR
Quarterly Term Premium Tracker

UK short-term interest rate expectations highlight upside inflation risks

Tracker Number 4

March 2022

"UK short-term interest rate expectations are growing well above the pre-pandemic level and the continued compression in the term premium suggests the market expects no surprises, with interest rates increasing gradually, particularly as the Russia-Ukraine conflict points to a high inflation-low growth risk scenario. This poses a significant trade-off for monetary policy makers after the pandemic."

Dr Corrado Macchiarelli
Research Manager for Global Macroeconomics

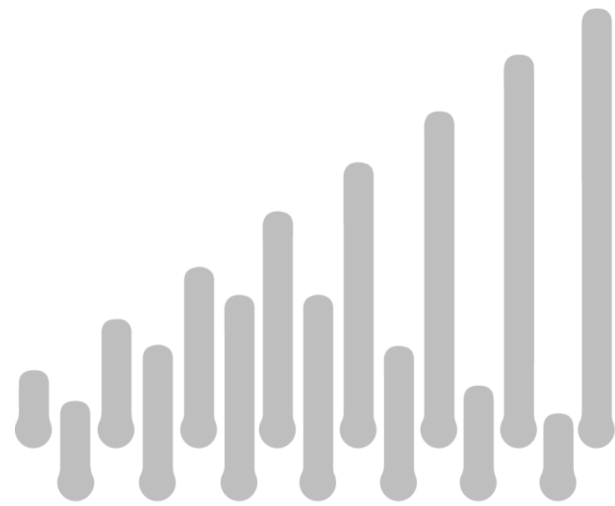
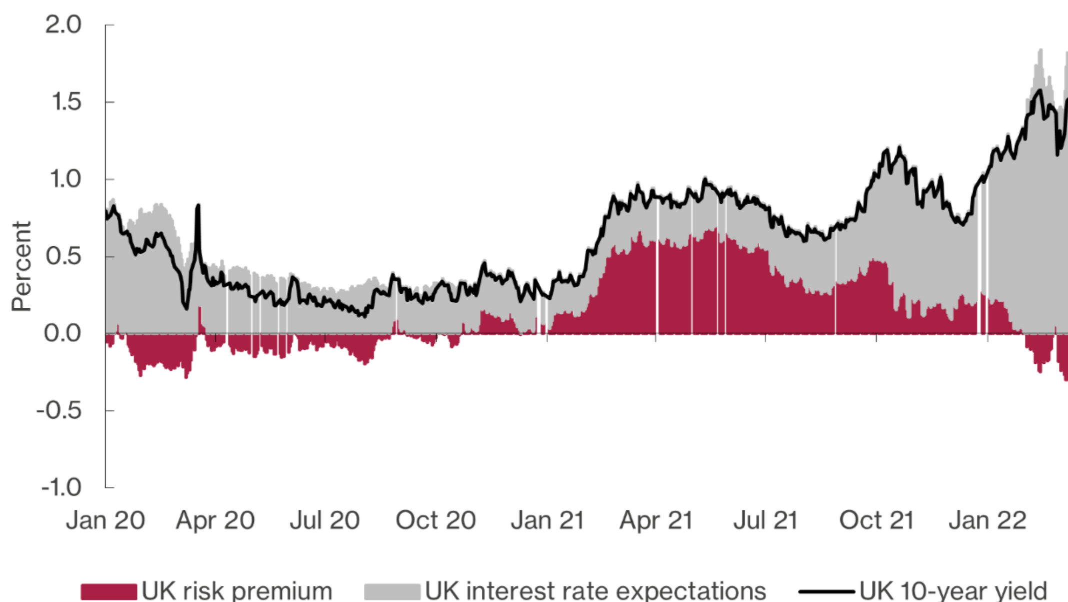


Figure 1 – UK 10-year government bond and decomposition by average current and expected future short-term interest rates and risk premium (per cent)



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

Main Points:

- We decompose long-term treasury 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.

- After the 1.2 per cent peak in October, the highest level since the start of the pandemic, the 10-year bond rate increased again since December, to 1.1 per cent, coinciding with the beginning of the Bank tightening cycle. Short-term interest rate expectations are now growing much above the pre-pandemic level, and a further compression in the term premium suggests the market sees no risk of policy rates going higher than the current level, particularly as the Russia-Ukraine conflict points to a high inflation-low growth risk scenario.

- The adjustment in the UK risk premium is consistent with our latest GDP growth forecast: economic activity has continued to grow during the first quarter of this year but we expect future growth to slow as the war in Ukraine and expected long-term elevation of energy prices are likely to affect the economy in the coming months. The risk premium decreased from 0.15 per cent in December to -0.2 by mid-March.

Interest rate expectations, capturing markets' expectations of rates over the longer horizon, have been more volatile recently, increasing up to 1.84 per cent until mid-February, the highest raise since the start of the pandemic, but have subsequently moderated to around 1.40 at the beginning of March and currently stand at 1.76 as markets have incorporated the news of the Russia-Ukraine conflict.

- The UK headline inflation rate has increased significantly to 5.5 per cent in January 2022 and is now expected to peak at around 8.6 per cent in the second quarter of 2022 (revised up from 7 per cent in our February Outlook) based on our latest simulation taking into account the economic costs of the Russia-Ukraine conflict. As inflation data continue to be strong, mainly driven by energy prices (28.3 per cent) and electricity (19.1 per cent) in February, treasury rates could rise further over the coming months.
- While the market expects no surprise, it is now unclear whether short-term expectations will increase further as the Bank of England might decide to postpone any further tightening of policy to avoid pushing the UK economy into a technical recession.
- US government bond rates have also increased close to 2 per cent, with a still negative term premium at the 10-year maturity, consistent with the estimates by the Federal Reserve Bank of New York. Interest rate expectations have continued to increase to average 2.5 per cent as the latest FOMC meeting in January signalled tightening policy sooner than expected given persistent upward inflation. However, this position will likely be revised during the March FOMC meeting given that the Russia-Ukraine conflict now poses a dilemma to monetary policy makers.
- German 10-year Bund yields turned positive since the beginning of March to reach 0.2 per cent. Euro area interest rate expectations turned positive since October 2021, and are now close to 0.5 per cent, suggesting that the odds of the ECB overshooting its target have gone up significantly. The inflation rate is over three times higher than the European Central Bank's target of 2 per cent and hopes that it would peak during the first half of 2022 have evaporated as the war in Ukraine threatens to drive oil prices up further.

Since our previous bond premium tracker in December, inflationary pressures have intensified in the first quarter of this year mainly on the back of escalating energy prices. This more inflationary environment is consistent with the higher bond yields in the UK.

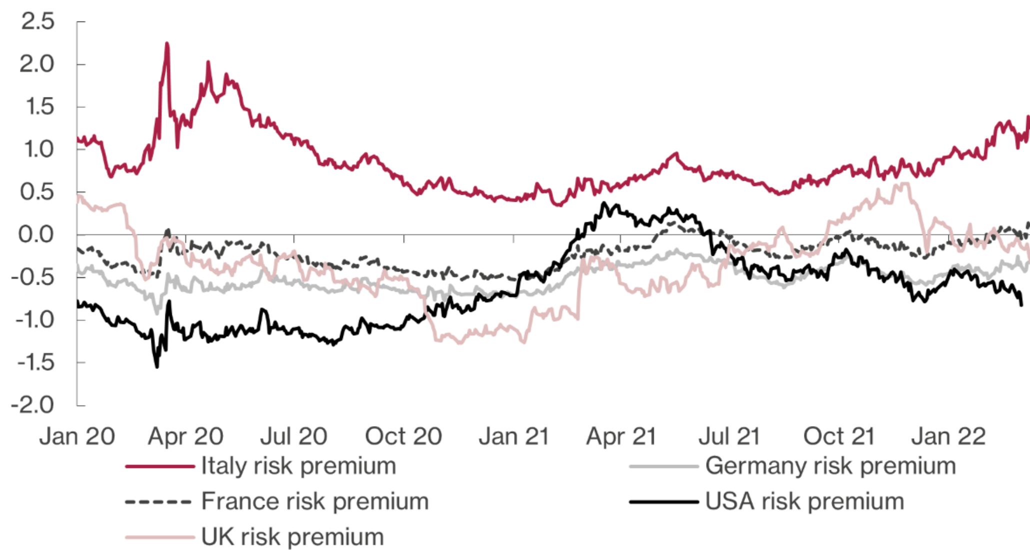
The UK unemployment rate has decreased by 0.2 percentage points on the quarter, to 3.9 per cent in the three months to January, but it remains higher than it was two years ago, just before the pandemic struck. Yet, the Bank of England's Monetary Policy Report in February highlighted that inflation pressures in 2022 and 2023 might be more persistent than the Bank expected earlier. The report was however released before the Russian invasion of Ukraine and the extent and timing by which interest rates might need to rise to bring inflation close to the 2 per cent target is unclear at the moment.

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 February 2022, the 12-month US CPI inflation rate accelerated to 7.9 per cent year-on-year, the highest level in the past 40 years. Core CPI, which excludes food and energy costs, was up 6.4 per cent from a year earlier, broadly in line with previous projections. This is consistent with the US labour market developments, where, according to the most recent US payroll data, the unemployment rate edged down to 3.8 percent in February 2022, compared to 3.5 per cent two years ago, and the labour force participation rate edged up to 62.3 percent in February, the highest level since March 2020.

US inflation expectations, as measured by the 10-year breakeven inflation rate, have climbed to 2.9 per cent on 8 March, which is the highest level observed since 2003, when data from the Federal Reserve St Louis (FRED) started, and moderated to 2.84 per cent thereafter. The recent spike in rate expectations could be attributed to the underlying dynamics in HCP inflation, where energy remained the biggest contributor in February (27 per cent), with gasoline prices surging 40%. Despite the recent drop, inflation expectations point to an upside inflation risk, which could prompt the Fed to reconsider the amount by which they will hike rates at the March Federal Open Market Committee meeting.

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



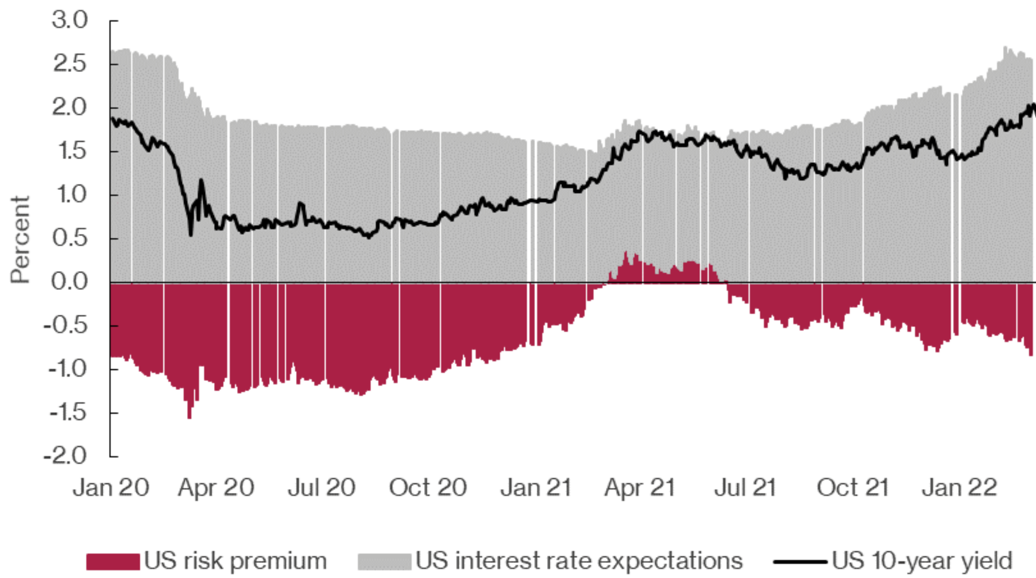
Source: Authors' calculations based on data by Bank of England

Looking at international movements in risk premia for countries such as Germany, Italy and France, suggests that risk premia have continued on an upward trend until the beginning of March. According to Eurostat estimates, consumer price inflation increased to 5.8 per cent year-on-year in February 2022, up from 5.1 per cent the previous month. Energy continued to record the biggest price increase.

The ECB startled markets when it announced a more aggressive tapering of its asset-purchase programme than anticipated. They are now purchasing €70 billion per month through the programme, which will drop to €40 billion in April before tapering by €10 billion per month until June. The ECB had planned to taper over two quarters, so the different pace indicates that the ECB is becoming increasingly worried about inflation building up. The inflation rate is over three times higher than the European Central Bank's target of 2 per cent and hopes that it would peak during the first part of 2022 have evaporated as the war in Ukraine intensified the energy crisis.

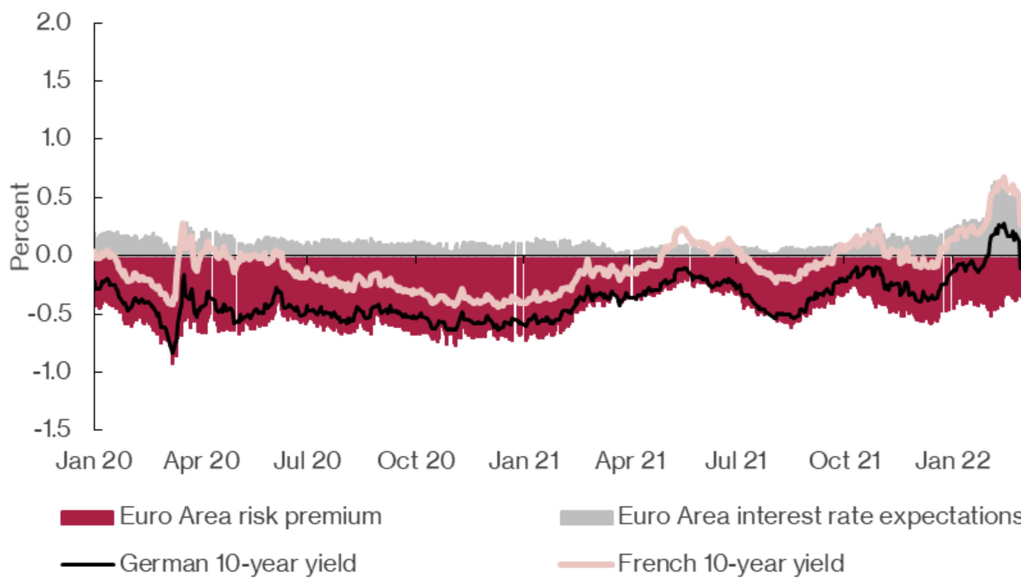
Albeit volatile in recent months, interest rate expectations of euro area interest rate have more persistently moved to positive territory (figure 4), which, based on the model employed for generating future expected short-term rates, suggests markets are expecting a more hawkish monetary policy stance.

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 treasury yields into two components: expectations of the future path of short-term treasury 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 Treasury yields will not evolve as expected.

National Institute Term Premium Tracker aims to provide quarterly updates of the bond term premia estimates for the UK, the US and some selected European countries based on current daily zero-coupon bond yields data. The bond term premia estimates at the 10-year maturity and the expected average short-term rates for the same maturity are based on daily data from 1961 to Sept 3rd, 2021. The analysis is based on a five-factor, no-arbitrage term structure model, described in detail in the references below (see 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.

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 Database https://fred.stlouisfed.org/series/DGS10

References

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Notes for Editors

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