

NIESR Quarterly Term Premium Tracker

Market Expecting Interest Rates to Rise Further

Tracker Number 5

June 2022

"UK short-term interest rate expectations are continuing to rise, reaching their highest level since the pandemic. The continued low term premium suggests the market is fairly certain that interest rates will continue to go up."

Dr Corrado Macchiarelli

Research Manager for Global Macroeconomics

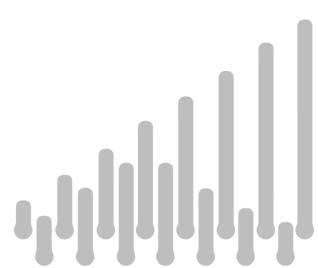
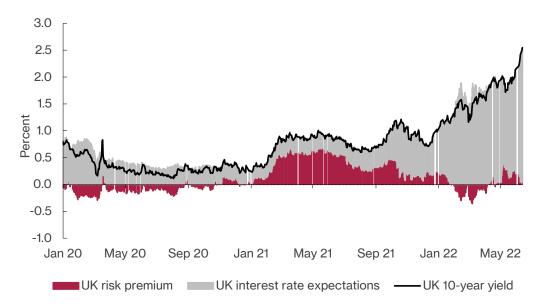


Figure 1 – UK 10-year government bond and decomposition by average current and expected future short-term interest rates and risk premium (per cent)



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

Main Points:

- We decompose long-term 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.
- The 10-year bond rate has been increasing since December, initially as a result of the beginning of the Bank tightening cycle, and from February through June also as a result of the Russia-Ukraine conflict. Short-term interest rate expectations are now much above the pre-pandemic level, and a further compression in the term premium suggests the market sees little uncertainty that interest rates will continue to go up.
- The adjustment in the UK risk premium is consistent with a low growth-high inflation scenario as the result of the war. Based on our latest <u>GDP growth tracker</u>, April's headline 0.3 per cent fall in GDP appears to be principally driven by the winding-down of some of the pandemic-related measures, such as the Test and Trace programme, which had made significant positive contributions to GDP over most of the Covid-19 period. The risk premium increased from -0.2 in mid-March to 0.25 by the beginning of June, and it has somewhat receded afterwards. Interest rate expectations, capturing markets' expectations of rates over the longer horizon, have been increasing steadily recently, up to 2.5 per cent by mid-June, the highest rate since the start of the pandemic, as markets have reacted to the higher inflation news as the result of the Russia-Ukraine conflict.

- The UK's headline inflation rate surged to 9 per cent in April, the highest since 1982, owing to soaring energy prices, providing another sign that consumers' living standards are being squeezed. As inflation data continue to be strong, 10-year Government bond rates are expected to rise further over the coming months.
- US government bond rates had also increased above 3 per cent at the end of May, with
 a still negative term premium at the 10-year maturity, consistent with the estimates by
 the <u>Federal Reserve Bank of New York</u>. Interest rate expectations have continued to
 increase to average 3 per cent as the latest FOMC meeting on 14-15 June resulted in
 an interest rate hike of 75bp in a pledge to get inflation back to 2 per cent. The
 Monetary Policy Committee of the Bank of England, by contrast, only raised rates by
 25 basis points.
- German 10-year Bund yields continued to fluctuate around zero as the result of both high demand for safe-haven assets and the slow-down of the ECB asset purchases announced in April. Euro-area interest rate expectations continued to grow positive, reaching 1.7 per cent in June. Excluding energy, inflation rose to 4.6 per cent in May, from 4.1 per cent in the previous month, more than double the European Central Bank's target. This indicates that inflationary pressures in the Euro Area are still high and might have not peaked yet.

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

The Bank of England's <u>Monetary Policy Report</u> in May highlighted that inflation pressures might be more persistent and they may need to increase interest rates further in the coming months conditional on inflation developments in the next couple of years.

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 May 2022, the 12-month US CPI inflation rate unexpectedly accelerated further to 8.6 per cent year-on-year, the highest level in the past 40 years. Core CPI, which excludes food and energy costs, slowed for a second month to 6 per cent, however.

US inflation expectations, as measured by the 10-year <u>breakeven inflation</u> rate, have climbed to 2.9 per cent on 8 March, which is the highest level observed since 2003, the earliest point at which this data is available, and moderated to 2.6 per cent in June. 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 48 per

cent. Despite the recent drop, inflation expectations point to an upside inflation risk, which prompted the Fed to reconsider the amount by which rates were increased at the June Federal Open Market Committee meeting. The 75 basis point rise is now the largest rate hike since 1994.

3.5 3.0 2.5 2.0 1.5 1.0 0.5 0.0 -0.5 -1.0 -1.5 -2.0 Jan 20 May 20 Sep 20 Jan 21 May 21 Sep 21 Jan 22 May 22 Italy Germany France USA UK

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

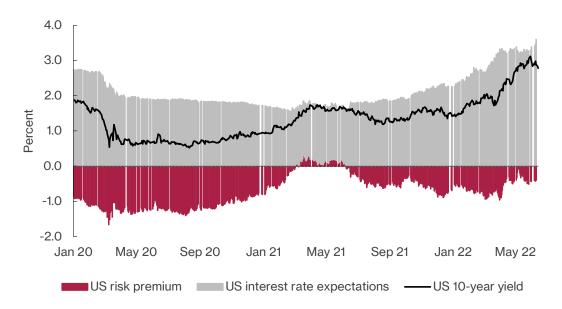
Source: Authors' calculations based on data by Bank of England

Looking at international movements in risk premia for countries such as Italy, Germany and France suggests that risk premia continued on an upward trend until the beginning of March. According to Eurostat estimates, consumer price inflation increased to 8.1 per cent year-on-year in May 2022; 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 €20 billion per month in June. However, during an extraordinary meeting on 15 June, the ECB announced it will move to address rising borrowing costs in the Euro Area's weaker economies, particularly in Italy, where rates have risen to levels that have reignited worries of a return to the sovereign debt crisis.

Albeit volatile in recent months, 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 were prepared for a more hawkish monetary policy stance until now. Nevertheless, in its latest statement the ECB said that it was speeding up work on a new "anti-fragmentation" instrument that would give it more flexibility in how it spends the funds from its pandemic-era bond-buying programme, PEPP. As a result, further liquidity injections from the initiative might be expected to help the most exposed Euro Area countries.

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

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

Macchiarelli Corrado (2021), NIESR Term Premium Tracker

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

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

Notes for Editors

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