US: THE RISE IN TREASURY YIELDS, A PUZZLE PERHAPS, A CONCERN FOR SURE

US Treasury yields have increased significantly since the end of July and this movement has accelerated in the past three weeks. It seems that the increase in the term premium has been a key driver although there is ambiguity about the underlying causes. There is no ambiguity however on the economic consequences: they are negative. A key channel of transmission is the housing market. Credit demand in general should suffer and another factor to monitor is the equity market considering that the earnings yield of the S&P500 is now lower than 10-year Treasury yields. All these factors represent a headwind to growth and may convince the FOMC that an additional rate hike before the end of the year is not warranted. A priori, such an outcome should pull investors back into the Treasury market. Perhaps the spike in yields will turn out just to have been a blip.

In a recent interview, Austan Goolsbee, the president of the Federal Reserve Bank of Chicago, called the timing of the recent rise in bond yields a puzzle: why did it happen in the past three weeks and not earlier[1]?

Trying to answer the question is indeed challenging. Long-term interest rates are influenced by a wide range of factors that sometimes work in different directions: expectations about the outlook for growth and inflation, surprises when economic data are released that differ from market expectations, monetary policy, central bank communication, public sector borrowing requirements, changes in investor demand, central bank purchases, quantitative tightening, etc.

The list is not exhaustive and illustrates the complex world of bond markets. However, certain factors can be grouped together. In the end, what matters is the expected real interest rate, expected inflation and a term premium (exhibit 1)[2]. The expected real rate is closely linked to the business cycle and reflects expectations about monetary policy. Expected inflation depends on many factors: recent inflation developments, the stance of monetary policy stance, belief in the effectiveness of monetary policy, central bank credibility, etc. Finally, the term premium corresponds to the sum of a real rate risk premium and an inflation risk premium.

It captures the factors not covered by the expectations about short-term real interest rates and inflation. One such factor is the preference of safe returns when economic growth is weakening[3]. The inflation risk premium depends on the volatility of inflation and the level of confidence about the expected inflation path. Factors that influence supply or demand -projected budget deficits, QE or QT, portfolio reallocations of investors- will also influence the term premium[4].

WHAT DRIVES NOMINAL BOND YIELDS?

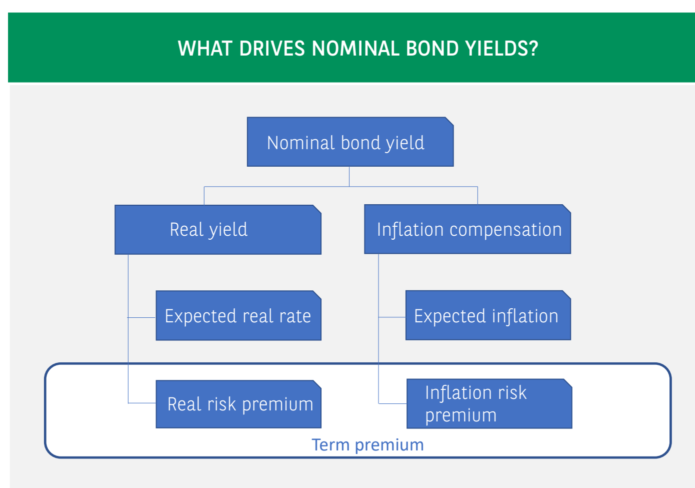

EXHIBIT 1 SOURCE: BANK OF ENGLAND, BNP PARIBAS

Against this background, what might explain the significant increase in US Treasury yields since the end of July and the acceleration of this movement in the past three weeks? Data released during the month of August showed a surprisingly strong economy.

This is reflected in the Federal Reserve Bank of Atlanta's nowcast for third quarter GDP, which in August almost reached 6.0% (seasonally adjusted annual rate) (chart 1). Subsequently it drifted lower -whilst remaining elevated-, so this doesn't explain the latest rise in yields.

1 Source: *Chicago Fed's Austan Goolsbee Sees 'Puzzle' In Recent Rate Spike*, Bloomberg, 5 October 2023.
2 The exhibit is a modified version of that appearing in *The yield curve and QE,* speech by Gertjan Vlieghe, external monetary policy committee member, Bank of England, 25 September 2018.
3 In such an environment, households will be concerned about rising labour income uncertainty -they fear an increase in the unemployment rate-, but also about the possibility that riskier assets such as equities would drop in value or that dividends would be cut. The ensuing loss in income and wealth could jeopardise their consumption habits, which is why they will invest more in bonds because they provide a certain revenue stream, thereby pushing down bond yields, and less in risky assets. Along the same lines, professional investors will switch from risky to riskless assets when they expect an economic downturn and its negative impact on the corporate profits outlook.
4 An explicit objective of QE is to drive down the term premium, thereby lowering bond yields.

> The recent rise in Treasury yields implies a tightening of financial conditions and represents a headwind to growth. It may convince the FOMC that an additional rate hike before the end of the year is not necessary.

US 10-YEAR TREASURY YIELD AND ATLANTA FED GDP NOWCAST

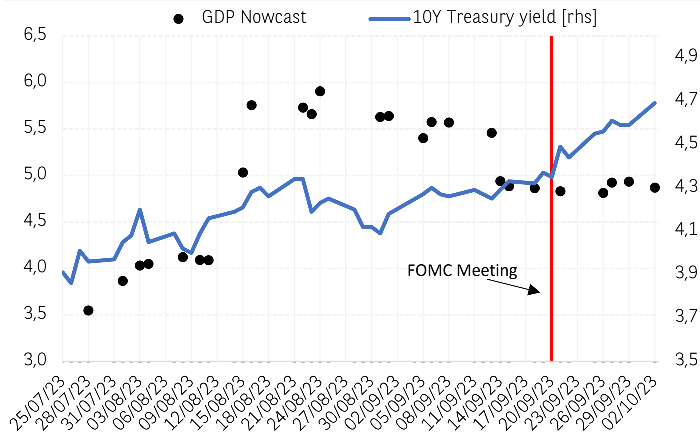

CHART 1 SOURCE: AND ATLANTA FED GDP NOWCAST

US: FED FUNDS FUTURES CURVE

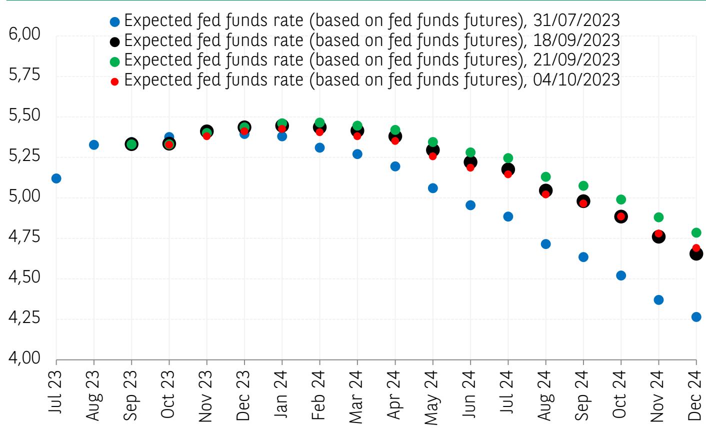

CHART 2 SOURCE: REFINITIV, BNP PARIBAS

US: BREAK-EVEN INFLATION

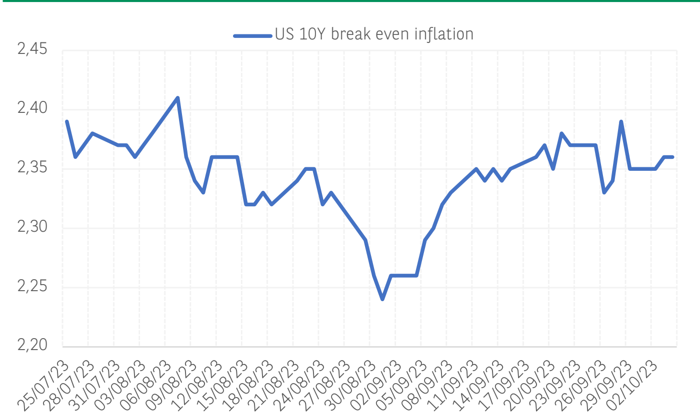

CHART 3 SOURCE: FEDERAL RESERVE BANK OF ST. LOUIS, BNP PARIBAS

US: 10-YEAR TREASURY YIELD: NOMINAL, REAL AND TERM PREMIUM

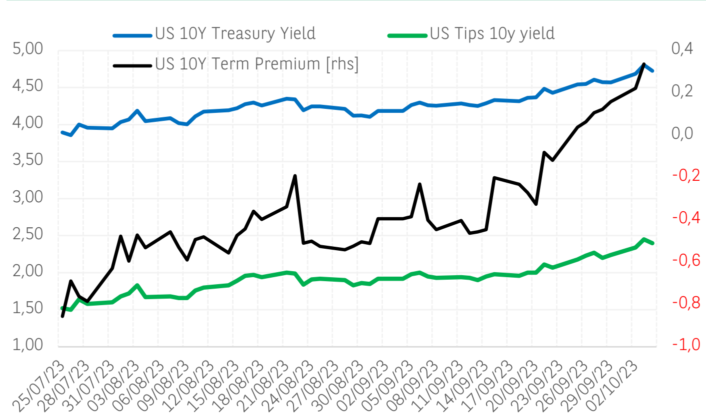

CHART 4 SOURCE: FEDERAL RESERVE BANK OF ST. LOUIS, BNP PARIBAS

The hawkish message coming from the FOMC meeting on 20 September triggered a jump in yields but doesn't explain why yields continue to rise subsequently. Market pricing of the federal funds rate next year increased following the meeting but has remained stable since (chart 2).

Turning to the inflation outlook as a possible cause, chart 3 shows that the break-even rate of inflation[5] has been stable for the past three weeks. After having declined in August and rebounded early September, it is back to its level at the end of July.

These different observations suggest that the rise in nominal yields essentially reflects an increase in real yields, which in turn is mostly driven by an increase in the term premium (chart 4). Different factors could explain the movement of the latter. One concerns the struggle in Congress to increase the debt ceiling and the risk of a government shutdown.

A second factor is the prospect of important gross borrowing requirements by the US government next year, combined with a reduction in the size of the Fed's balance sheet (QT). Both issues have been well-known for months but, strange enough, it seems investors only start to pay attention to it now. Finally, the rise in yields may have triggered stop-loss selling, causing an acceleration of the recent movement.

Despite the number of potential explanations -the list is not exhaustive-, the impression remains that the causes of the latest rise are hard to pin down. Austan Goolsbee has a point when he calls it a puzzle.

However, an even more important question concerns the economic consequences of the rise in yields. Does it matter? On this question the answer is unambiguously 'yes'. A key channel of transmission is the housing market. The rate on a 30-year mortgage has reached a level not seen since the end of the nineties (chart 5).

5 This corresponds to the difference between the yield on a nominal Treasury bond and the yield on an inflation-linked security of an equivalent maturity.