EDITORIAL

US: SHOULD WE WORRY ABOUT THE FLATTENING OF THE YIELD CURVE? NOT YET

The US yield curve has flattened, giving rise to comments that, given the historical experience, risk of a recession is increasing. Yet, when drawing conclusions, caution is warranted. Market-based inflation expectations, which are very high, should decline after a number of rate hikes. This could pull down long-term nominal bond yields, leading to a further flattening or even an inversion of the curve. However, a decline in inflation is growth-supportive. Another reason for caution is that due to past central bank asset purchases, the slope of the yield curve is less steep. Past QE may thus reduce its quality as a leading indicator of economic growth. For these reasons, an alternative indicator has been developed. The near-term forward spread compares market-based expectations for short-term interest rates in 18 months' time with current short-term rates. Its record as leading indicator is better and, what's more, the current spread is very large. This implies that we should not yet be concerned about the flattening of the yield curve.

When looking at the US yield curve, there is a déjà vu feeling. The curve has flattened significantly in recent weeks and media articles have quickly followed, explaining what this may signal about recession risk.

Such a reaction makes sense on theoretical grounds. Yields on long-dated bonds predominantly reflect longer-term expectations about short-term interest rates, which depend on monetary policy expectations, as well as a term premium[1]. A steep yield curve reflects an accommodative monetary policy stance with central bank rates well below their long-term expected values. A flattening of the curve implies a reduction of monetary support and may trigger a downward revision of the growth outlook. This revision will be more outspoken when the curve inverts. In that case, short-term rates are above their long-term expected value, policy is tight and is expected to be eased at some point because growth and inflation will have declined.

The theoretical argument may be compelling but the empirical evidence is an even stronger underpinning for the reaction of journalists and analysts alike. Such is the perceived quality of an inversion of the curve as a leading indicator of recession, that a mere flattening already gives rise to concern, based on the view that it is only a matter of time until an inversion will follow. Yet, caution is warranted in assuming that these stylised facts still apply as much today as they did in the past

One reason is that at present, market-based inflation expectations are very high because investors are concerned that inflation may continue surprising to the upside. When this view changes, break-even inflation – the difference between the yield on a nominal bond and the yield on an inflation-linked bond of the same maturity – will decline, pulling down, ceteris paribus, nominal bond yields at longer maturities. What follows in that case is a further flattening or even an inversion of the yield curve. However, such a development would reduce the risk of recession, rather than increasing it: a decline in inflation is growth-supportive because it raises households' purchasing power. Moreover, the Federal Reserve could afford to tighten less than initially envisaged. Another reason for caution is the influence of the Fed's balance sheet on the level of Treasury yields. Central bank asset purchases aim to influence long-term bond yields by lowering the term premium, so the slope of the yield curve should be less steep than in a world without QE. This may reduce its quality as a leading indicator of economic growth.

Assessing the growth outlook through the lens of the slope of the yield curve boils down to gauging whether monetary policy is growth supportive or a threat to growth. This provides an argument for looking at the shorter end of the yield curve.

US TREASURY AND MONEY MARKET CURVE

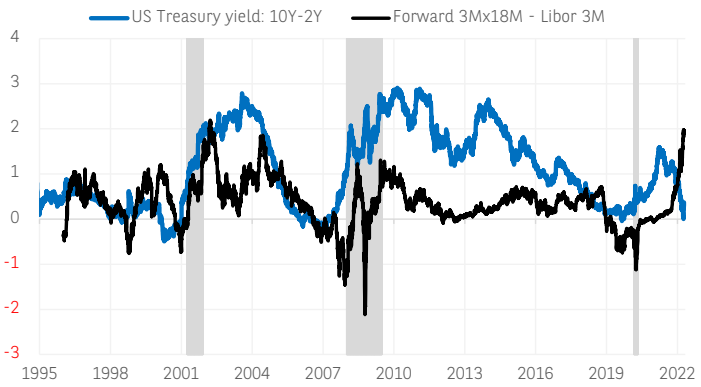

CHART 1

SOURCE: BLOOMBERG, BNP PARIBAS

1. This is a risk premium for investing in long-dated bonds rather than, over the same period, continuously rolling over an investment in short-dated Treasury bills.

The yield curve has flattened very significantly but the near-term forward spread is very high. The opposing signals, in combination with the better quality of the forward spread as leading indicator, imply that we should not yet be concerned about the flattening of the yield curve.

Its greater cyclical amplitude compared to the long end of the curve implies it is more sensitive to changes in the growth and inflation outlook. Hence its signal quality may be better. This is the approach followed by the Federal Reserve in a research note of 2018[2]. However, the comparison of a two or three year yield with the short-term interest rate could still be influenced by the term premium.

To avoid this, the authors calculate the near-term forward spread, i.e. the difference between the implied interest rate on 3-month Treasury bills in 18 months' time with the current 3-month rate[3]. This is then used to calculate the probability of a recession over the next four quarters[4]. It turns out that the near-term forward spread is highly significant and that the long-term spread – the 10-year yield minus the 2-year yield –, when added to the equation, is not significant. The accompanying chart has been inspired by this approach although for data availability reasons, libor rates (spot and forward) have been used to calculate the near-term forward spread[5]. As shown by the chart, recessions have been preceded by an inversion of this spread in combination with a flat or even inverted yield curve. At the current juncture, the yield curve has flattened very significantly but the near-term forward spread is very high.

The opposing signals, in combination with better quality of the forward spread as leading indicator, imply that we should not yet be concerned about the flattening of the yield curve. There is an important caveat however. The huge near-term forward spread reflects market expectations of significant monetary tightening over the next several quarters. If the FOMC proceeds as expected, this could end up pushing down long-dated bond yields and trigger a yield curve inversion. In addition to the discomfort this would create, aggressive tightening could also suddenly change the monetary policy outlook, causing a decline of the near-term forward spread. In such an environment, recession fears would inevitably increase.

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2. Source: *(Don't Fear) The Yield Curve,* Eric Engstrom and Steven Sharpe, FEDS Notes, 28 June 2018.
3. This forward rate can be inferred by comparing the yield to maturity on Treasury notes maturing 6 quarters from now and 7 quarters from now.
4. The data cover the period 1972-2018.
5. This may bias the signal in times of financial stress, i.e. when the TED-spread –the difference between libor rates and Treasury bill rates- increases.