Isabel Schnabel: The monetary policy non-puzzle in bond markets

Speech by Ms Isabel Schnabel, Member of the Executive Board of the European Central Bank, at the Bond Market Contact Group meeting, Frankfurt am Main, 15 September 2021.

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Accompanying slides of the speech.

Sovereign bond markets in the euro area and the United States have taken a remarkable turn over the summer.[1] Despite the ongoing strong recovery from the crisis, the revival of inflation and surveys signalling firming expectations among market participants that central bank asset purchases globally may gradually slow in the near future, sovereign bond yields have declined and partly reversed the upward trend observed in the beginning of the year.

In my remarks today I will discuss the drivers of recent bond market developments and zoom in on two factors that may currently pull yields lower: one relates to concerns regarding the spread of the Delta variant, the other is monetary policy. While the first factor may be puzzling, the second is less so.

Real (not nominal) interest rates are the puzzle

At the start of the year, sovereign yield curves across advanced economies steepened visibly. A decline in new coronavirus (COVID-19) infections, a rising share of the population being vaccinated and prospects of large fiscal stimulus programmes on both sides of the Atlantic boosted risk sentiment and supported a reflation trade that put upward pressure on long-term nominal bond yields (left-hand chart, Slide 2).

Starting in early June, however, long-term yields took a remarkable turn to the downside in the United States and in the euro area. By early August, euro area GDP-weighted 10-year yields were again trading in negative territory, and 10-year US Treasury yields fell by 40 basis points over the same period.

Since then, low yields have frequently been tested by better-than-expected macroeconomic data, or by inflation prints that challenged the “transitory” hypothesis. Yields occasionally spiked upwards and today remain above the lows we saw in August. But there still seems to be a deep gravitational pull that is keeping long-term yields from rising to anywhere close to the levels seen during the last recovery in 2017-18, or even to the levels seen earlier this year.

In the euro area, exceptionally low interest rates extend across the entire currency union (right-hand chart, Slide 2). Sovereign spreads over German Bunds remain below or close to post-2008 lows, suggesting that common factors related to risk-free rates are currently dominating conditions in sovereign bond markets.

A closer inspection of these risk-free rates in the euro area exposes a dichotomy in the way investors are charting the path to recovery from the crisis. Since the beginning of the year, nominal overnight index swap (OIS) rates have been pulled in opposite directions by two competing forces (left-hand chart, Slide 3).

On the one hand, market-based measures of inflation compensation have persistently put upward pressure on nominal rates, as one would expect to see at this stage of the economic cycle. Based on the developments in inflation compensation alone, nominal 10-year OIS yields in the euro area would be more than 70 basis points above the level prevailing at the beginning of the year.

5-year, 5-year forward inflation swap rates have also risen well above pre-pandemic levels (right-

hand chart, Slide 3) and recently reached their highest level in more than four years. As such, market-based inflation expectations seem to suggest that investors see the recovery from the crisis as an opportunity to escape the low inflation environment that has dominated the macroeconomic landscape for many years.

But the measurable parallel decline in real interest rates has offset a large part of the rise in nominal yields that would have resulted from higher inflation expectations. The real 10-year OIS rate in the euro area fell to yet another record low over the summer (Slide 4). At close to -1.9%, it now stands at an exceptional distance from its average since the outbreak of the global financial crisis. The real 10-year rate in the United States is somewhat higher but has also declined visibly over the course of the year.

The behaviour of real yields has puzzled many market participants. In a recovery, real long-term yields would typically recover from the lows of the crisis and rise back to levels that are broadly consistent with the (new) real growth potential of the economy.

Given the unprecedented fiscal and monetary policy response to this crisis, large public infrastructure programmes on both sides of the Atlantic and a strong push to accelerate the transition towards a greener and more digital economy, it might be expected that real interest rates would be higher, not lower, following the pandemic.

The absence of such an upward move, at least so far, may therefore either imply that investors have succumbed to the idea of secular stagnation, and hence revised down the future expected path of short-term interest rates, or, alternatively, that other factors are holding yields down.

The Delta puzzle

The factors that may explain current bond market conditions remain the subject of intense market speculation. I would like to focus on two such factors pointing in different directions as to whether current yield levels constitute a puzzle or not.

The first relates to the possibility that the market may be overestimating the risks to the global growth outlook from the spread of the more contagious Delta variant.

Our analysis shows that, in the United States, adverse macroeconomic shocks – in all likelihood related to COVID-19 – have systematically suppressed long-term interest rates since about May (left-hand chart, Slide 5). To some extent, this seems surprising.

There is no doubt that the Delta variant has started affecting mobility and business conditions in contact-intensive services industries in some regions, especially in the United States. It is also likely that the Delta variant is aggravating and prolonging supply bottlenecks (right-hand chart, Slide 5), also because vaccination rates in emerging economies remain low. All in all, the Delta variant has many characteristics of a genuine supply-side shock, raising prices and lowering output.

But market analysts' growth expectations suggest that this shock is widely perceived as being short-lived. For example, Consensus Economics' expectations for real GDP growth in 2022 have remained unscathed by the renewed surge in infection rates, both in the euro area and the United States (left-hand chart, Slide 6). These expectations have continued to increase and have settled at levels well above estimated potential growth rates.

A recent survey among European fund managers showed that only 3% of investors consider COVID-19 as a significant risk to the growth outlook.[2] High and rising vaccination rates in advanced economies are expected to make growth increasingly immune to economically painful stop-and-go disruptions.

Similarly, credit rating upgrades have recently outpaced downgrades by a substantial margin on both sides of the Atlantic (right-hand chart, Slide 6). In Europe, the pace of upgrades has even accelerated compared with the second quarter.

The Delta explanation becomes even more of a puzzle when considering recent developments in stock markets, which have continued their undeterred rally over the summer (left-hand chart, Slide 7). Today, the Euro Stoxx is some 15% above its pre-pandemic level. The Standard & Poor's 500 index currently stands almost 40% above its pre-pandemic level.

Low and declining discount rates have supported stock prices over time. Yet, a simple dividend discount model suggests that revisions to longer-term earnings expectations explain most of the rise in valuations since the middle of the year – that is, over the period where bond yields declined (right-hand chart, Slide 7). In the United States, earnings expectations are well above pre-pandemic levels. In the euro area, they recently surpassed their pre-pandemic level.

In other words, to the extent that lower real yields actually reflect growth concerns, they would point to a decoupling between sovereign bond market pricing on the one hand and stock markets' and analysts' growth expectations on the other.

The monetary policy non-puzzle

The second factor that may explain current bond market conditions relates to monetary policy.

There are two ways in which monetary policy may help explain current bond yields.

The first is through the persistent effects of asset purchases. The ECB, the Federal Reserve System and other major central banks have acquired a substantial amount of assets during the crisis. The ECB, for its part, has bought assets worth more than €1.3 trillion under the pandemic emergency purchase programme (PEPP) alone since March last year, or nearly 12% of last year's euro area GDP, resulting in a visible decline in the euro area bond free float (left-hand chart, Slide 8).

The stock of acquired assets together with current and prospective reinvestments already provides substantial policy accommodation. ECB simulations show that our joint asset purchase programme (APP) and PEPP holdings can be expected to put sizeable downward pressure on interest rates across the maturity spectrum even in three to five years' time (right-hand chart, Slide 8).[3]

Having these effects in mind, it may be less surprising that real rates on both sides of the Atlantic have so far resisted broad upward pressure despite firming expectations that the pace of net asset purchases globally will gradually be reduced in the near future.

The second way in which monetary policy may help explain current low yields is through a perceived change in the reaction functions of central banks, largely reflecting recent adjustments to strategic frameworks.

And, indeed, an inspection of the correlation patterns between future interest rates and inflation expectations suggests that the market may have recently reappraised the way central banks will adjust policy rates, particularly in the euro area (Slide 9). The trend line is much flatter than in the past – that is, markets expect less monetary policy tightening for each incremental improvement in the medium-term inflation outlook.

Such correlation patterns do not imply causality. But they do suggest that the market may have started internalising our new forward guidance, especially regarding the conditions that we need to see to start raising policy rates.

First, we want to see inflation reaching 2% well ahead of the end of our projection horizon and we want it to remain at 2% thereafter. And, second, realised progress in underlying inflation needs to be sufficiently advanced to be consistent with inflation stabilising at 2% over the medium term.

In other words, given the significant uncertainty surrounding inflation projections many years out, we want to see clearer signs that inflation is reliably moving towards our 2% target. This will imply a more patient reaction function, consistent with the previous scatterplot analysis, and hence may also imply a transitory period in which inflation is moderately above target.

Two additional developments corroborate the view that investors have started internalising our more patient reaction function.

One relates to the distribution of risks around the future interest rate outlook.

After the announcement of our new strategy and forward guidance, the risk distribution around the future evolution of the 3-month Euribor has been truncated from the top, meaning that investors have effectively priced out contingencies that foreshadow a very steep increase in policy rates (Slide 10). Such expectations are consistent with our new September ECB staff projections, which show that inflation is expected to remain below our 2% target in the medium term.

The second development relates to the distribution of risks around the future inflation outlook.

Since the beginning of the year, the balance of risks priced in by investors has noticeably shifted to the upside. Option prices, for example, currently suggest that, in the United States, the market attaches a probability of around 80% that inflation over the next five years will, on average, be above the Federal Reserve's 2% aim (left-hand chart, Slide 11).[4] In the euro area, the priced-in probabilities are smaller but have also increased visibly to nearly 40%.

This is also increasingly reflected in the euro area bond market. The compensation that investors demand for uncertainty around the future inflation outlook – the inflation risk premium – has increased measurably since the start of the year, albeit from very depressed levels (right-hand chart, Slide 11).

Yet, despite growing upside risks, the sensitivity of rate expectations to changes in the inflation outlook has not changed. This suggests that investors have understood that higher inflation prospects will need to visibly migrate to the baseline scenario and be reflected in actual underlying inflation dynamics before they warrant a more fundamental reassessment of the medium-term inflation outlook, and hence the future course of monetary policy.

Conclusion

Let me conclude.

Sovereign bond yields are at exceptionally low levels. Record low real interest rates provide substantial policy accommodation, supporting the recovery and paving the way for inflation to reach our 2% target in the medium term. It is likely that the stock of acquired assets as well as our new forward guidance are contributing to keeping real yields anchored at low levels. Consequently, current low real yields may be less puzzling than they may appear at first sight.

As the economy returns to full strength and underlying price pressures build durably and visibly, market-based interest rates can be expected to increase in line with the state-contingent nature of our forward guidance. The conditions that we have laid out for raising interest rates ensure that this adjustment will not happen prematurely but only once we are confident that inflation will converge to our 2% target in the medium term.

Thank you.

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[1] I would like to thank Johannes Gräb for his contributions to this speech.

[2] Bank of America Global Research (2021), European fund manager survey, 14 September.

[3] These simulations assume future purchases corresponding to the median response from our survey of monetary analysts (SMA).

[4] Options are based on consumer price index (CPI) inflation, but the Federal Reserve System states its goal for inflation in terms of the personal consumption expenditure (PCE) price index.