UNWARRANTED SPREAD WIDENING: MEASUREMENT ISSUES

In recent weeks, the prospect of several ECB rate hikes has caused an increase in Bund yields and, unexpectedly, several sovereign spreads. Beyond a certain point, higher spreads may become unwarranted. Under such circumstances, the ECB might consider stepping in to avoid that its policy transmission would be impacted. Determining whether sovereign spreads have increased too much is a real challenge. Historically, based on a 20-week moving window, the relationship (beta) between the BTP-Bund spread and Bund yields fluctuates a lot, so this calls for taking a longer perspective. Using data since 2013, the current spread is in line with an estimate based on current Bund yields. Clearly, other economic variables should be added to the analysis. It shows the complexity of the task should the ECB commit to address unwarranted spread widening.

Recently, certain euro area sovereign spreads - the difference between government bond yields in a given country and the yield on German government bonds of equivalent maturity, which are considered as the risk-free benchmark, - have widened significantly. This has raised concern that it could influence the transmission of monetary policy and has even led to an *ad hoc* meeting of the ECB governing council on 15 June *"to exchange views on the current market situation"*[1].

When the ECB signals its intentions to raise its deposit rate, one should expect that the entire structure of short and long-term interest rates, both in capital markets (government and corporate bond yields) and in bank-based financing, will shift upwards. Higher yields on German government bonds should cause some spread widening for more heavily indebted sovereign issuers but also for corporates (chart 1). This can occur even in the absence of a worsening in the near-term economic outlook. Investors who target a certain yield need to take less exposure to e.g. Italy or corporate bonds when Bund yields have increased significantly. The spread can also increase because investors require some extra yield as a protection against a possible deterioration of the credit quality.

However, beyond a certain point, higher spreads become unwarranted based on the fundamentals in terms of credit quality. As a consequence, demand and economic activity might suffer in certain countries because, due to a disproportionate increase in long term interest rates - reflecting higher Bund yields and a wider spread -, financial conditions would tighten more than what the ECB was expecting when deciding to raise the deposit rate. This gives rise to fragmentation risk. The disconnect between spreads and fundamentals worsens the economic outlook, thereby causing higher risk aversion and further spread widening, *'giving rise to non-linear and destabilizing dynamics'*.[2]

In such case, the ECB considers, with reason, it should step in to avoid that its policy transmission would be impacted. This is the logic behind the 'believe me it will be enough' speech of Mario Draghi in July 2012 or behind Isabel Schnabel's recent speech at the Sorbonne in which she explained *"there can be no doubt that, if and when needed, we can and will design and deploy new instruments to secure monetary policy transmission and hence our primary mandate of price stability."*[3]

EURO AREA HIGH YIELD BOND SPREAD AND SOVEREIGN SPREAD

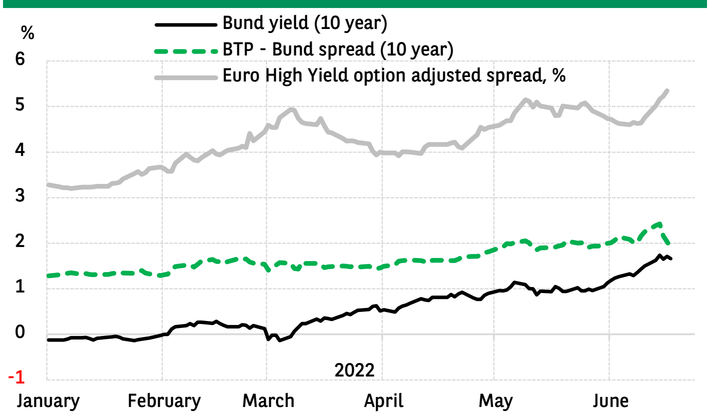

CHART 1 SOURCE: REFINITIV, FRED ST. LOUIS, BNP PARIBAS

1. Source: ECB, Statement after the ad hoc meeting of the ECB Governing Council, 15 June 2022.
2. ECB executive board member Isabel Schnabel defines fragmentation in terms of yields instead of spreads: "fragmentation reflects a sudden break in the relationship between sovereign yields and fundamentals, giving rise to non-linear and destabilizing dynamics." Source: United in diversity – Challenges for monetary policy in a currency union, Commencement speech by Isabel Schnabel, Member of the Executive Board of the ECB, to the graduates of the Master Program in Money, Banking, Finance and Insurance of the Panthéon-Sorbonne University, Paris, 14 June 2022
3. Source: see footnote 2.

Historically, based on a 20-week moving window, the relationship (beta) between the BTP-Bund spread and Bund yields fluctuates a lot, so this calls for taking a longer perspective. Using data since 2013, the current spread is in line with an estimate based on current Bund yields.

Announcing a commitment is one thing, implementing it is another and raises a host of complex questions[4] starting with what is an unwarranted widening of spreads?

An obvious starting point is to look at the relationship between sovereign spreads and Bund yields. Chart 2 does this for the Italian spread (BTP-Bund) using weekly data since 2013[5] by calculating the rolling 20-week beta between the BTP-Bund spread and the 10-year Bund yield. This coefficient fluctuates a lot and changes sign. As an example, in the spring of 2018 it was very negative due to a significant spread widening - on the back of political uncertainty in Italy - and a decline in German yields.

The variability of the beta raises the question of which period to use when assessing whether the observed spread is warranted given the level of Bund yields. The table shows in row 1 that, using the most recent 20 weeks of data, the observed spread on 17 June was 20 basis points below the estimated spread. Row 2 uses 20 weeks of data starting in August 2021. The beta is significantly lower and the observed spread on 17 June was 65 basis points above the estimated one. Using the entire sample (row 3), with data going back to 2013, the observed spread on 17 June was 17 basis points below the estimate.

Different conclusions can be drawn from these calculations. One, based on a 20-week moving window, the relationship (beta) between the BTP-Bund spread and Bund yields fluctuates over time. After being in negative territory since early 2021, the beta has recently seen a significant increase and is now positive again. Two, considering that Bund yields have moved higher, this has created a feeling of a 'double whammy' for the spread on the back of a rise in German yields and an increased beta. Three, the variability of the short-term beta calls for taking a longer perspective. Using data since 2013, the current spread is more or less in line with an estimate based on current Bund yields.

BTP-BUND SPREAD AND BUND YIELD (10-YEAR)

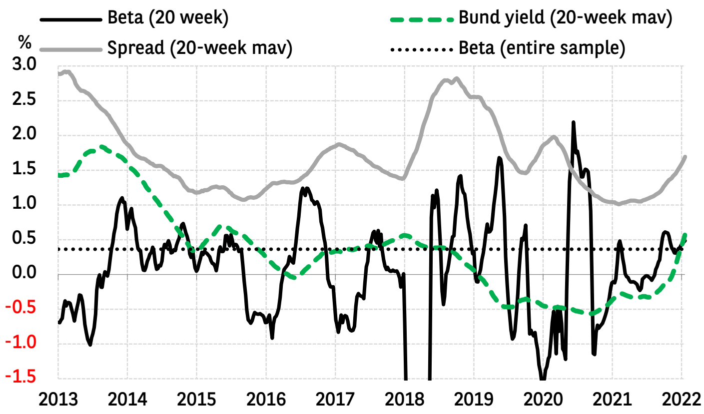

CHART 2

SOURCE: REFINITIV, BNP PARIBAS

Four, clearly there is a need to incorporate additional economic variables in the analysis because they will condition the reaction of Italian yields to changes in German yields. One can think of the stance of monetary policy - the role of net asset purchases, the outlook for the deposit rate -, the outlook for growth and public finances, the risk appetite of investors, etc. It shows the complexity of the task when committing to address unwarranted spread widening, all the more so given the number of spreads that need to be monitored.

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4. E.g. conditionality, target spread, interference with monetary policy, etc.
5. 2013 was chosen to avoid that the euro sovereign debt crisis would influence the estimation results.

ESTIMATED SPREAD ITALY-GERMANY

Estimation period (weekly data)	Observed minus estimated	Observed spread	Estimated spread	Intercept	Beta	Bund yield*	BTP yield*
21 January 2022 - 10 June 2022	-0.20	2.045	2.244	1.411	0.486	1.716	3.761
27 August 2021 - 14 January 2022	0.65	2.045	1.395	1.192	0.119	1.716	3.761
4 January 2013 - 10 June 2022	-0.17	2.045	2.211	1.583	0.366	1.716	3.761

* yield on 17 June 2022

TABLE 1

SOURCE: REFINITIV, BNP PARIBAS