10/30Y BTP spread: A steepener trade looks better than a flattener

by Chiara Cremonesi, FI Strategist (UniCredit Bank, London)

- The 10/30 BTP spread has flattened sizably since the beginning of February and currently trades at 95/96bp (on Bloomberg fair value, 103/104bp taking BTP Aug29 and Sep49), the lowest level since August 2019.
- We present a fair value model for the 10/30Y BTP spread based on the BTP "idiosyncratic" premium (as a proxy for the BTP credit spread), the level of rates and supply pressure at the extra-long end of the curve.
- Our model, based on Bloomberg fair value, indicates that the 10/30Y spread should be more than 15bp steeper than where it is now.
- Even with a larger BTP "idiosyncratic" premium, a higher level of core rates and much lower supply pressure at the extra-long end compared to the start of this year, our model predicts virtually no flattening of the 10/30Y spread from current levels. Given that 10/30Y BTP flattener trades have a negative carry, we prefer to position for a steepener (with a slightly positive carry).
- The key risk to this trade in the short-term is a prolonged risk-off market that continues to weigh on periphery and especially BTPs, or a scenario where idiosyncratic risk in Italy increases.

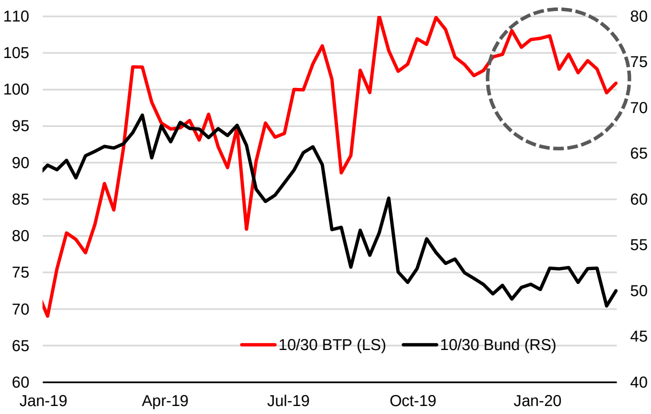
In this piece, we investigate the main market drivers of the 10/30Y BTP spread and introduce our fair-value model. We conclude that the 10/30Y spread is currently too flat and we see very little room for further flattening; in this respect, we prefer 10/30Y BTP steepeners. The main risk to this trade in the short-term is a prolonged risk-off market that continues to weigh on periphery and especially BTPs. So far, the 10/30Y BTP spread has flattened less than in other similar risk-off scenarios, however this remains the key risk at the moment.

1. 10/30Y BTP spread has flattened sizably

The 10/30Y spread has flattened quite sizably in the last few weeks, and is now trading at 95/96bp, according to Bloomberg fair value, (103/104bp based on BTP Aug29 and Sep49), at the lowest level since August 2019 and more than 10bp lower than at the beginning of February. Until very recently the reason for the flattening at the extra-long end of the curve was most probably yield hunting, as 10Y BTP yields increased slightly, while 30Y BTP yields went down; indeed, the flattening happened in a context of stable 10Y BTP/Bund. Over the last few days, BTPs came under pressure, following the increase in cases of COVID-19 in Northern Italy. The reaction of the 10/30Y BTP was a bear-flattening, in combination of episodes of bear-steepening.

10/30Y flatteners on the BTP curve are a very popular trade among investors (and this has been the case for a few months now) and while traditionally they have been interpreted as a defensive trade (the 10Y area of the BTP curve is the most liquid, and therefore the most affected in the event of selling pressure), with core and periphery yields going to ultra-low levels, some investors might have decided to extend maturity beyond the 10Y area in search of more appealing yields, which is typical behavior on core curves.

CHART 1:
10/30Y BTP FLATTENING OVER THE LAST FEW WEEKS



Source: Bloomberg, UniCredit Research

2. The role of insurance and pension fund demand for BTPs in determining the 10/30Y spread performance

The performance of the extra-long end of EGB curves is determined by the level of rates, the credit spread in case of periphery countries, but it is also heavily exposed to the dynamics of demand and supply.

Historically, eurozone insurance firms and pension funds have been active buyers of extra-long government bonds and this has increasingly been the case in the last few years. Data from Eurostat and the ECB shows that eurozone insurance and pension funds hold 43%, 30%, 28% and 28% of the total outstanding of general government debt securities in Belgium, France, the Netherlands and Spain, respectively. In this section, we explore the role that demand from these investors plays in the performance of 10/30Y spread, in particular in Italy.

A Bank for International Settlements paper by Dietrich Domanski, Hyun Song Shina and Vladyslav Sushko[1] argues that falling long-term interest rates tend to widen the negative duration gap between the assets and liabilities of insurers and pension funds and that the efforts of these players to rebalance the asset-liability mismatch by increasing the duration of their assets leads to a further compression in bond yields. Accounting rules and solvency regulations introduced in the last few years may have further reinforced this effect. The study was made in 2015 and refers to the compression of EGB yields in 2014 ahead of the start of quantitative easing (QE), which the paper shows was exacerbated by the behavior of insurance companies and pension funds when yields started falling.

If that is the case, as core bond yields decline, insurance and pension fund holdings of government bonds, especially at the extra-long end maturities, will increase and this, in turn, should cause a flattening of the 10/30Y EGB spreads. The relationship should be stronger in countries whose government paper is deemed "safer" (so in countries with higher rating) or in countries where the free floating paper is scarcer (e.g. Germany, where foreign officials and the Eurosystem hold more than 70% of federal debt securities).

TABLE 1: INSURERS AND PENSION FUNDS' DEMAND AS A DETERMINANT OF THE 10/30Y SPREAD PERFORMANCE

	% of general government securities held by eurozone insurance and pension funds*	Correlation between holdings and 10/30Y performance
IT	23%	26%
GE	11%	-74%
AT	28%	-35%
BE	43%	-29%
FR	30%	-35%
NL	28%	-32%
SP	28%	-14%

*The table shows **1.** the portion of general government debt securities of each country held by all eurozone insurers and pension funds **2.** the correlation between this portion and the 10/30Y performance in the same country. The correlation is calculated on quarterly data from December 2013 until September 2019, due to the availability of data on holdings of insurers and pension funds.

Source: Haver, Bloomberg, UniCredit Research

Table 1 shows that indeed there is an inverse relationship between holdings of government bonds by eurozone insurers and pension funds of specific countries government securities and the 10/30Y spread in that country. The relationship is stronger in Germany (likely due to the scarcity of government paper) and in Austria and France. Interestingly, Italy is the only country with a positive correlation.

The explanation could be that for insurers and pension funds in northern European countries, Italy is considered too risky. Indeed, looking at the data from the ECB's securities holdings statistics, most of the Italian government paper held by these players is held by domestic insurers and pension funds. If we look at the correlation coefficient for Spain, it is negative, but much weaker than for the other core countries, suggesting that the extra-long end of the SPGB curve also benefits less than core and semi-core countries govies from demand from eurozone insurers and pension funds; the reason most likely lies in the fact that Spain has a lower rating than France and it is perceived as more risky.

Therefore, demand from eurozone insurers and pension funds is not correlated to a flattening of the 10/30Y BTP spread.

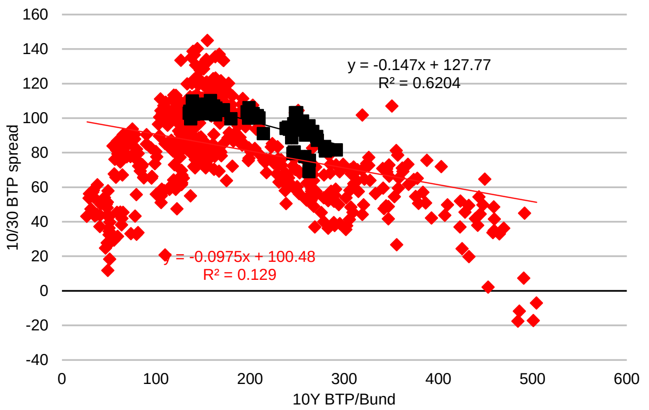
3. The role of market variables in determining the 10/30Y BTP spread performance

The other main determinants of the 10/30Y BTP spread performance are the Italian credit spread and the level of rates. The supply of extra-long paper also plays a role.

Chart 2 shows that traditionally when the 10Y BTP/Bund spread widens, the 10/30Y BTP spread flattens. This is because when there is pressure on BTPs, the most liquid part of the curve, the 10Y, is the one that is under more pressure. Note that the relationship has not been linear in the past, with episodes of extreme stress in the BTP market leading to a very pronounced flattening of the 10/30Y spread.

The relationship has strengthened sizably since the beginning of 2019 (black dots' sample) and for similar level of the 10Y BTP/Bund spread, the level of the 10/30Y BTP spread has been higher compared to the past. At the moment, according to the relationship that has prevailed over the last year or so, the current 10/30Y BTP spread is flatter than the level predicted by the 10Y BTP/Bund spread.

CHART 2: 10/30Y SPREAD FLATTENS WHEN BTPS COME UNDER PRESSURE



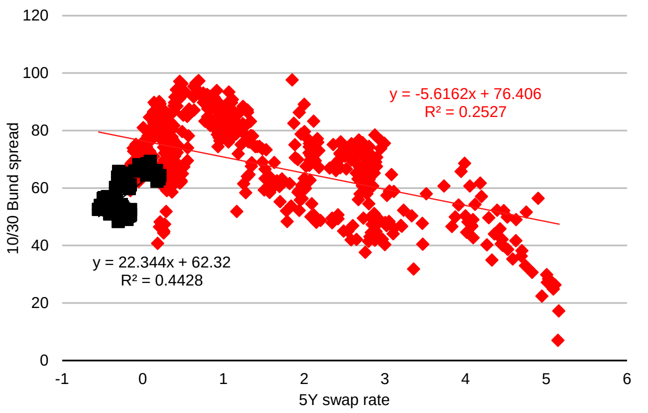
The red sample is from January 2008 until present, the black sample runs from January 2019 to present. The data are weekly.

Source: Bloomberg, UniCredit Research

[1] "The hunt for duration: not waving but drowning?"

The level of rates is also an important determinant of the 10/30Y BTP spread. Interestingly, Chart 3 shows that the 10/30Y spread in Germany has historically been negatively correlated with the level of swap rates, indicating that an increase in the level of rates would lead to a flattening of the 10/30Y Bund spread. However, over the last year, the relationship has worked in the opposite way (see black dots' sample). In our view, this is due to yield hunting and a scarcity of safe paper at the extra-long end of the curve. In other words, as rates dropped below zero, investors started to move along the curve, also beyond the 10Y maturity. The demand for duration from insurers and pension funds likely also played a role in pushing extra-long yields down further.

CHART 3: LOW RATES TRIGGERED A CHANGE IN THE RELATIONSHIP BETWEEN THE LEVEL OF RATES AND THE 10/30Y BUND SPREAD

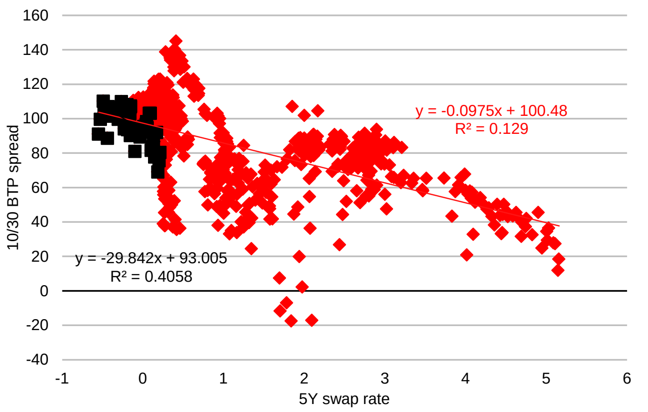


The red sample is from January 2008 until present, the black sample runs from January 2019 to present. The data are weekly.

Source: Bloomberg, UniCredit Research

On the BTP curve, this relationship is still negative and over the last year it has been much stronger than in the past (see Chart 4).

CHART 4: NO EVIDENCE OF YIELD-HUNTING BEHAVIOR BEYOND THE 10Y MATURITY ON THE BTP CURVE

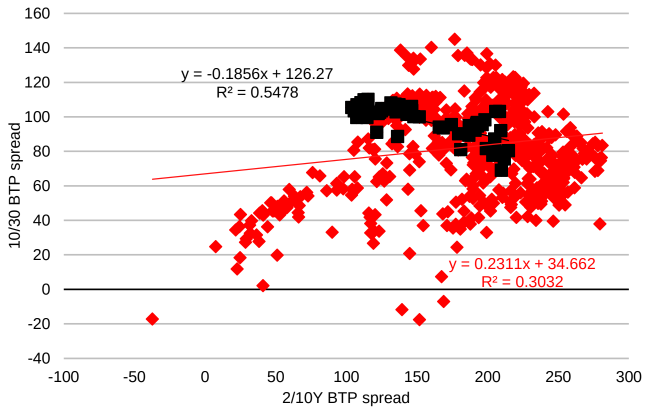


The red sample is from goes from January 2008 until present, the black sample goes from January 2019 to present. The data are weekly.

Source: Bloomberg, UniCredit Research

In other words, there is no strong evidence of yield hunting on the BTP curve beyond the 10Y maturity. Further proof of this comes from the relationship between the 2/10Y and the 10/30Y BTP spreads. In the last year, the relationship has been negative, so a 2/10Y flattening did not imply a flattening of the BTP curve beyond the 10Y maturity. Rather the contrary (see Chart 5).

CHART 5: 2/10Y BTP AND 10/30Y BTP, NEGATIVE RELATIONSHIP OVER THE LAST YEAR



The red sample is from January 2008 until present, the black sample runs from January 2019 to present. The data are weekly.

Source: Bloomberg, UniCredit Research

4. Our fair value model for the 10/30Y BTP spread

With all this in mind, we have developed a model for the 10/30Y BTP spread (we take Bloomberg Fair Values) based on:

1) **Credit spread:** Instead of using the 10Y BTP/Bund spread, which could cause a collinearity issue with the level of rates, we use the residual of our 10Y BTP/SPGB spread model[2] to account for the idiosyncratic risk in Italy. We recall that our BTP/SPGB spread model is based on differentials in macro fundamentals between Italy and Spain (we use cyclical indicators), the differential in economic policy sentiment and the differential in holdings of govies by foreigners and the central bank (QE) in the two countries. We use the residual of this model to capture political risk in Italy, but also the idiosyncratic risk linked to a much higher public debt/GDP and lower rating compared to Spain.

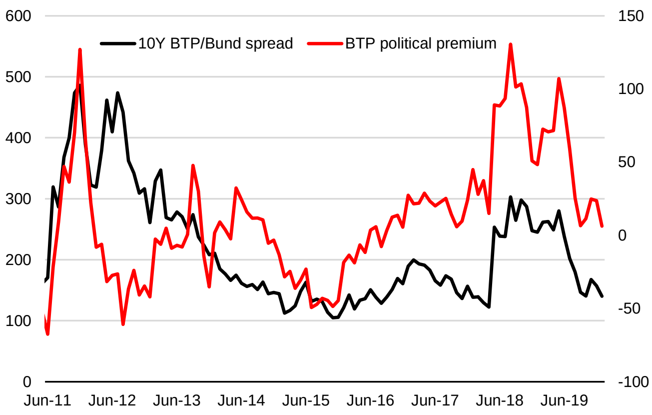
   This variable excludes all episodes of BTP spread widening that are mostly related to general risk aversion or contagion from other periphery countries (in which case the SPGB/Bund spread would also widen) and singles out episodes of BTP widening that are due to idiosyncratic issues (most often related to politics, see Chart 6).

[2] See Rates Perspectives – 10Y BTP-SPGB spread: wide compared to fundamentals but convergence to fair value is tricky.

Following our analysis in the previous section, we expect the coefficient of this variable to have a negative sign.

For the sake of completeness, we also run an alternative version of the model that includes the 10Y BTP/Bund spread as a measure of credit spread and show the results later in this section.

CHART 6: BTP POLITICAL PREMIUM VS. 10Y BTP/BUND SPREAD



Source: Bloomberg, UniCredit Research

2) **The level of EGB yields:** We take the 5Y swap rate. Following our analysis in the previous section, we expect the coefficient of this variable to have a negative sign.

3) **Supply of extra-long instruments:** Taking advantage of the ECB's QE program, Italy has increased its issuance at the extra-long end of the curve quite sharply in the last few years. In 2019, Italy executed 16% of its medium to long-term funding at the extra-long maturities, the highest proportion since 2016. We expect 13% of this year's medium and long-term funding to be executed at the extra-long end. Issuance has weighed on the 10/30Y spread, leading it to steepen. This was especially true in the first part of the year, a period when issuance was particularly heavy in the last two years. As a variable in our model, we take the monthly proportion of funding executed at extra-long maturities, and we expect it to have a positive sign.

We do not insert any proxy for demand in our model. As we showed in section 2, the extra-long end of the Italian curve is not affected in the "right" direction by demand from insurance and pension funds, contrary to what happens in other eurozone countries. In addition, after having been inserted into our model, the coefficient is not significant.

We estimate this model on monthly data in a sample from January 2011 until present. We chose to start in 2011 because, before that date, the model performed quite poorly.

The R-squared of the model is 38% (although it is much higher for a more-recent sample, for instance, from 2016 it climbs to 70%).

All coefficients have the expected sign and are significant at least with a 5% level, with the only exception being the supply variable, which is significant at the 10% level of confidence. Results are shown in Table 2.

TABLE 2: RESULTS OF OUR MODEL

	Supply	5Y swap	Idiosyncratic premium	C
Coeff.	34.9	-19.1	-0.2	97.5
	**	***	***	***
R-sq.	38%			

***significant at the 5% level
**significant at the 10% level

Source: Bloomberg, UniCredit Research

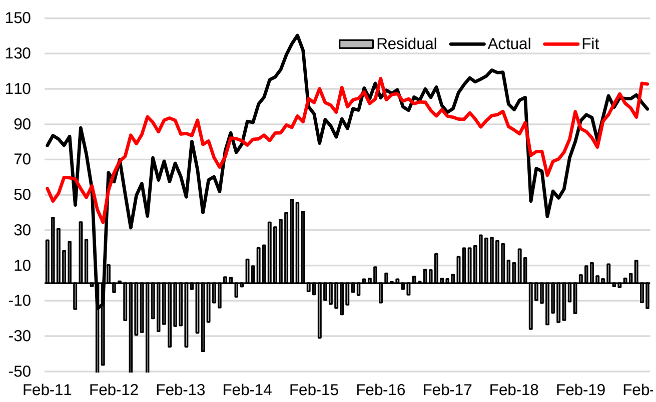
A ten-unit rise in the BTP idiosyncratic premium (quite a moderate rise) will trigger a narrowing in the 10/30Y BTP spread of 2.0bp.

A 10bp rise in the 5Y swap rate causes a 1.9bp narrowing of the 10/30Y BTP spread.

Lastly, a 10% rise in the portion of monthly issuance executed at the extra-long end triggers a 3.4bp widening of the 10/30Y BTP spread.

Chart 7 shows that the 10/30Y BTP spread should be steeper than it is currently and that it should be trading at 113bp (at the moment, with BFV applied, it is trading at 95/96bp).

CHART 7: THE 10/30Y BTP SPREAD SHOULD BE STEEPER ACCORDING TO OUR MODEL



Source: Bloomberg, UniCredit Research

To align the fit of our model with the current 10/30Y spread value, the BTP political premium needs to increase to at least 35bp, the 5Y swap rate needs to increase to the -0.20% area and the proportion of issuance executed at the extra-long end needs to decline to 10% in March – this is a low value, and it corresponds to a month with the extra-long end only being tapped in auctions and for a low amount.

If the coronavirus outbreak slows significantly, if a risk-on mood emerges in markets in the next few weeks (this is rather unlikely at the moment) and if the 5Y swap rate increase sharply to -0.10% (a level observed at the turn of the year), our model predicts that the 10/30Y BTP spread should be around 100bp, still steeper than now.

For this reason, we would prefer setting up a 10/30Y steepener on the Italian curve at this stage, which also has a positive carry.

We investigate how our model would change when considering the 10Y BTP/Bund spread as a variable for credit risk in Italy. Results are presented in Table 3 and Chart 8.

TABLE 3: RESULTS OF OUR MODEL WITH 10Y BTP/BUND

	5Y swap	10Y BTP/Bund	C
Coeff.	-7.0	-0.2	138.6
	***	***	***
R-sq.	71%		

***significant at the 5% level

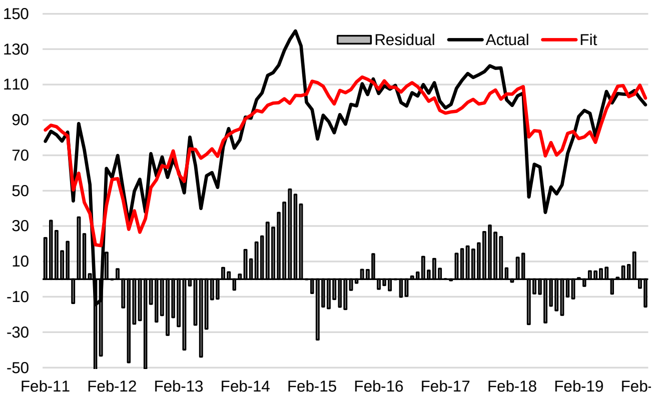
Source: Bloomberg, UniCredit Research

First of all, we have to drop the supply variable because it takes the wrong sign in this specification. This could be due to the fact that in the past, moments of generalized pressure on periphery spreads have led to a very sharp decline in supply at the extra-long end.

Even without the supply variable however, the R-squared of the model increases significantly to above 70%. The model indicates that the current level of the 10/30Y BTP spread is still too flat (by ca. 5bp) although by a smaller amount compared to our preferred specification.

That said, if we pencil in an increase of the 10Y BTP/Bund spread to 200bp, the model would predict a 10/30Y BTP spread around 96bp. Which again is not far from current levels.

CHART 8: ALTERNATIVE VERSION OF OUR MODEL FOR THE 10/30Y BTP SPREAD



Source: Bloomberg, UniCredit Research

5. The key short-term risk to our 10/30Y steepener trade

The main risk to this trade in the short-term is a prolonged risk-off market that continues to weigh on periphery and especially BTPs. So far, the 10/30Y BTP spread has flattened less than in other similar risk-off scenarios, however this remains the key risk at the moment. The mitigating factor is that in case the deterioration in market sentiment continues, this will likely also involve a further decline in the level of rates, which in theory would offset some of the flattening due to the widening of the credit spread.

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