# BTPi breakeven curve: too flat and too low

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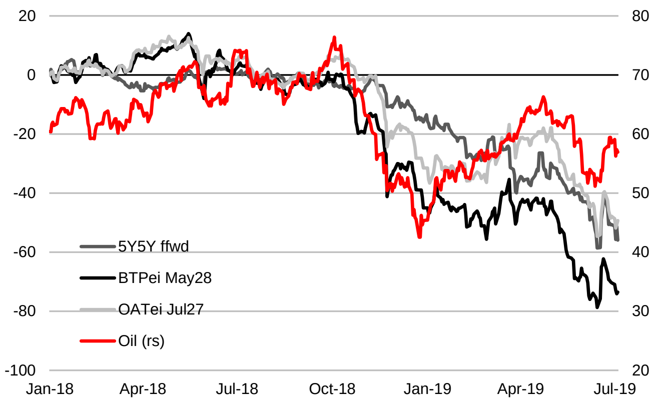
- BTPis have missed the last leg of the BTP rally and, as a result, now trade at real yields that are very close to the nominal curve.
- While investors are concerned that Italian inflation may be negatively affected by weak economic growth, current breakeven levels are well below our economists' forecasts.
- We show how BTPis in the five-year area would fare in different inflation and real-yield scenarios. This analysis suggests that BTPis are likely to outperform nominal BTPs in most cases.
- We expect Italy to sell a new BTPi in November. A successful sale is likely to support the asset class as a whole, through a liquidity effect.

## 1. Intro

A key theme that has driven markets in recent months is the deterioration in inflation expectations, both in the euro area and at global level. In the US, breakeven inflation has dropped towards 1.70%, about the lowest level since 2016. In the euro area, the famous 5Y5Y forward inflation has declined to 1.2%, almost erasing all the improvement that occurred after Mario Draghi's speech in Sintra. In this context, it is no surprise that ILBs have been under pressure.

In the case of Italy, BTPeis have underperformed ILBs issued by other countries.

**CHART 1: MARKET-BASED INFLATION EXPECTATIONS ARE FALLING**




Source: Bloomberg, UniCredit Research

Even more stunning is the cheapening seen in BTPi, which have lagged the rally of recent weeks and currently trade with a yield difference relative to the nominal bonds of just 10-30bp, depending on maturity.

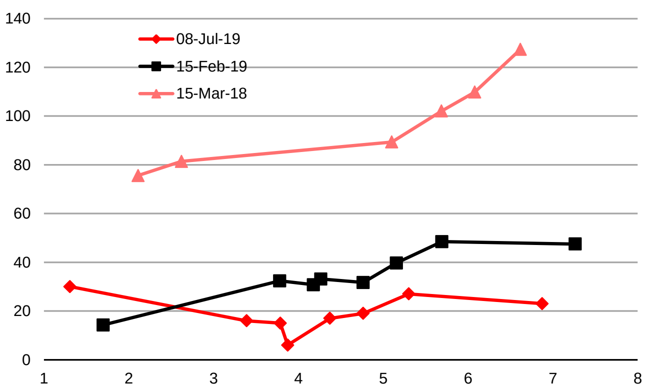
In this note we will discuss why this asset class has underperformed and why we see current breakeven levels as a buying opportunity, especially over a medium term investment horizon.

## 2. BTPis tell a story of depressed and un-improving inflation

The uncertain economic outlook and tame oil prices have led to a deterioration of inflation expectations in the eurozone. The drop in 5Y5Y forward inflation reflects lower spot BE and a flatter breakeven curve, which also implies a subdued path for forward inflation levels.

BTPis have also been under selling pressure. The BE of BTPi May23 has hit zero in recent days while the BTPi Oct24 is trading at a real yield just 25bp below nominal yields.

**CHART 2: BTPI CURVE IS FLAT**




Breakeven is calculated from real yields of BTPi adjusted for the index ratio

Source: Bloomberg, UniCredit Research

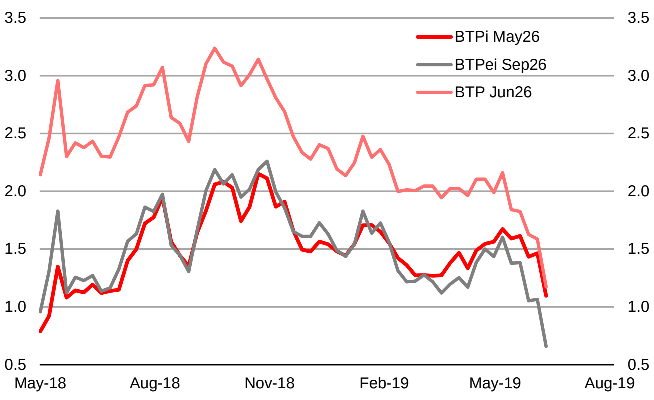
The chart above shows BTPi breakeven inflation, calculated with yields adjusted for the index ratio.

The deterioration of inflation expectations is quite clear: first, between mid-March 2018 and mid-February 2019, the breakeven curve flattened, especially at the long-end, with the breakeven of BTPi Oct24 falling from 120bp to 50bp. The flattening of the BE curve indicates a loss of confidence in the recovery of inflation in the medium term. Then, between mid-February and mid-March, the overall level of BE plunged (with the breakeven curve remaining remarkably flat) implying not only that inflation would not increase in the medium term but also that it would remain very low. Since then, the breakeven curve has remained flat and the BTPi Oct24 currently trades at a breakeven of just 25bp. Since mid-March 2018, 5Y BTPi breakeven has declined by roughly 100bp, a much larger move than 5Y inflation swaps, which have declined by around 50bp.

The current breakeven level indicates that investors are pricing in Italian inflation at close to zero in the coming years and are hence willing to buy BTPis at a real yield almost identical to that offered by nominal BTPs. Such a low level of breakeven can be viewed as a very cheap option, even taking into account that BTPi have to offer a liquidity premium. Part of the current cheapness of the asset class may be due to the complexity of the instrument, which has probably discouraged some investors over time, but even so current breakeven levels are quite low.

An important point to stress is that BTPis have missed the recent rally, as Chart 3 shows.

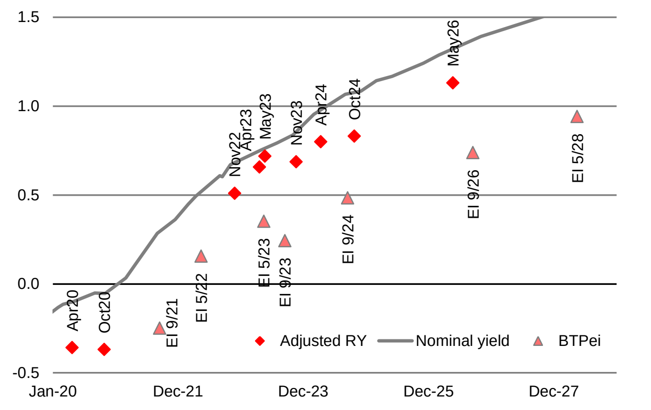
**CHART 3: BTPI VS. BTPEI AND BTP**




Source: Bloomberg, UniCredit Research

The flattening of the BTPi breakeven curve, coupled with the shape of the nominal curve, implies that the BTPi real yield curve is rather steep. This creates the case for maturity extension.

**CHART 4: BTPI REAL YIELD CURVE IS STEEP**

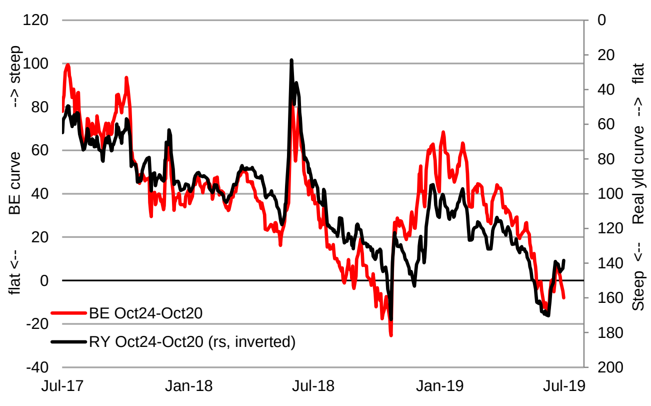



Real yield of BTPi is adjusted to consider the index ratio effect

Source: Bloomberg, UniCredit Research

Chart 5 helps visualize the recent move in the BTPi curve, in both breakeven and real yield terms.

**CHART 5: BTPI OCT24 VS. BTPI OCT20**




Source: Bloomberg, UniCredit Research

## 3. BTPi issuance

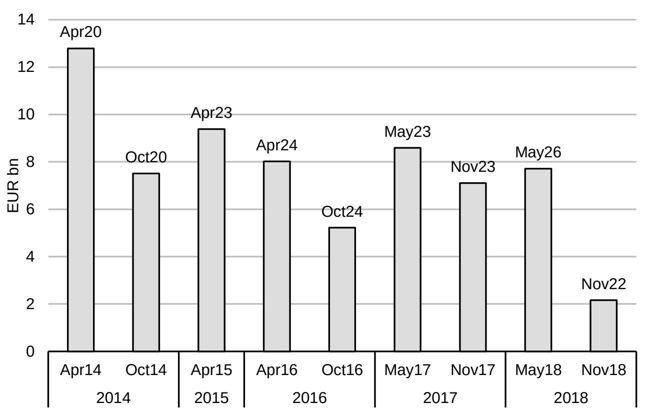
The Italian Treasury has not issued a BTPi so far this year. The decision has probably been the result of weak demand for inflation-linked products given the current environment of subdued inflation expectations, coupled with very healthy demand for long-maturity bonds (which has permitted to the Treasury to issue at cheap rates and to support the average life of debt).

In addition, the last sale of a BTPi in November 2018 received weak demand, mainly because it occurred in a period of elevated tension on the credit spread. This has probably led the Treasury to adopt a prudent approach so far this year.

In line with the 2019 funding guidelines, we expect a new BTPi to be sold after the summer break, possibly in October or November.

A successful sale, particularly in terms of issue size, would have a positive effect on the whole asset class, by casting a favorable light on liquidity going forward.

**CHART 6: BTPI ISSUANCE HISTORY**




BTPi Apr20 was issued for an amount of EUR 20.6bn, its current lower outstanding reflects buyback operations

Source: Bloomberg, UniCredit Research

### 4. How have BTPis performed historically? A lookback analysis

In this section, we analyze the total return an investor would have achieved historically from BTPis compared to nominal BTPs, BTPeis and a CCTeu with similar tenor.

We will focus on the (now) short-dated BTPi 1.25% Oct20 and the longer-maturity BTPi 0.35% Oct24.

Table 1 illustrates how total return can be divided into coupon, inflation and price components.

The investment periods we will analyze are:

- **1 July 2017 to 5 Jul 2019** – a relatively long period to gauge the performance related to macro trends (inflation, yields, etc.).
- **1 May 2018 to 30 November 2018** – period of market volatility and spread widening.
- **8 February 2019 to 5 July 2019** – the last period of spread tightening.

**TABLE 1: HISTORICAL PERFORMANCE OF BTPI OCT20**

| Rank | Bond | Coupon return | Price return | Inflation compensation | Holding Period Return |
|---|---|---|---|---|---|
| **Period from 1 Jul 2017 to 5 Jul 2019** | | | | | |
| 1 | BTPei 2.1% Sep21 | 3.7% | -3.8% | 3.1% | 2.9% |
| **2** | **BTPi 1.25% Oct20** | **2.5%** | **-3.1%** | **1.7%** | **1.1%** |
| 3 | BTP 4% Sep20 | 1.9% | -1.1% | - | 0.9% |
| 4 | CCTeu Dec20 | 7.2% | -6.4% | - | 0.8% |
| **Period from 1 May 2018 to 30 Nov 2018** | | | | | |
| 1 | BTP 4% Sep20 | 2.1% | -3.9% | - | -1.7% |
| **2** | **BTPi 1.25% Oct20** | **0.8%** | **-3.6%** | **1.2%** | **-1.7%** |
| 3 | CCTeu Dec20 | 0.6% | -3.0% | - | -2.4% |
| 4 | BTPei 2.1% Sep21 | 1.0% | -7.4% | 2.3% | -4.2% |
| **Period from 8 Feb 2019 to 5 Jul 2019** | | | | | |
| 1 | BTPei 2.1% Sep21 | 0.8% | 1.2% | 0.8% | 2.8% |
| 2 | CCTeu Dec20 | 0.4% | 1.1% | - | 1.5% |
| **3** | **BTPi 1.25% Oct20** | **0.4%** | **0.7%** | **0.0%** | **1.3%** |
| 4 | BTP 4% Sep20 | 1.5% | -0.5% | - | 1.0% |

Source: Bloomberg, UniCredit Research

Over the last two years, the BTPi 1.25% Oct20 has provided a return of slightly more than 1% – positive, although less than that of BTPei Sep21, reflecting the fact that Italian inflation has been quite tame. This BTPi has outperformed nominal BTPs.

Short dated BTPi fared well also during the sell-off that occurred last year, experiencing losses more contained than CCTeu and BTPei, both of which were more exposed to credit risk repricing. For example, BTPei were more heavily penalized because of their high cash price (related to accrued inflation).

During the recent BTP rally, BTPi Oct20 achieved a positive return but lagged behind BTPei and CCTeu – which started with a higher level of credit risk premium.

Things are somewhat different when we look at longer maturity bonds. The BTPi 0.35% Oct24 delivered a negative return over the last two years (and significantly below both nominal BTPs and BTPei). This was caused by a low coupon level coupled with strongly negative price performance.

During the May 2018 sell-off, longer-maturity bonds experienced heavy losses and the BTPi Oct24 was no exception, although it performed better than BTPei and CCTeu. Finally, Table 2 highlights that long-maturity BTPis underperformed nominal bonds during the recent rally.

**TABLE 2: HISTORICAL PERFORMANCE OF BTPI OCT24**

| Rank | Bond | Coupon return | Price return | Inflation compensation | Holding Period Return |
|---|---|---|---|---|---|
| | | | **Period from 1 Jul 2017 to 5 Jul 2019** | | |
| 1 | BTP 2.5% Dec24 | 4.8% | 1.5% | - | 6.3% |
| 2 | BTPei 2.35% Sep24 | 4.3% | -1.5% | 2.9% | 5.7% |
| **3** | **BTPi 0.35% Oct24** | **0.7%** | **-2.7%** | **1.8%** | **-0.1%** |
| 4 | CCTeu Oct24 | 1.1% | -1.7% | - | -0.6% |
| | | | **Period from 1 May 2018 to 30 Nov 2018** | | |
| 1 | BTP 2.5% Dec24 | 1.4% | -8.5% | - | -6.9% |
| **2** | **BTPi 0.35% Oct24** | **0.2%** | **-9.7%** | **1.3%** | **-8.1%** |
| 3 | BTPei 2.35% Sep24 | 1.2% | -11.8% | 2.2% | -8.4% |
| 4 | CCTeu Oct24 | 0.3% | -10.0% | - | -9.5% |
| | | | **Period from 8 Feb 2019 to 5 Jul 2019** | | |
| 1 | BTP 2.5% Dec24 | 1.0% | 6.0% | - | 7.2% |
| 2 | BTPei 2.35% Sep24 | 1.0% | 5.2% | 0.8% | 7.2% |
| 3 | CCTeu Oct24 | 0.2% | 4.9% | - | 5.3% |
| **4** | **BTPi 0.35% Oct24** | **0.1%** | **4.3%** | **0.0%** | **4.6%** |

Source: Bloomberg, UniCredit Research

## 4. Going forward

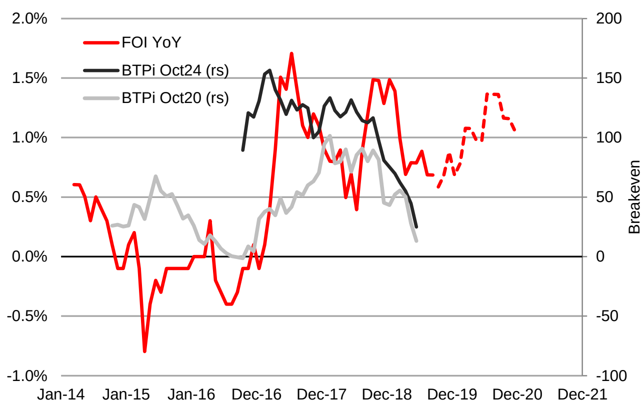
In the previous paragraph we highlighted the performance of BTPis in various periods, which is very useful to understand the behavior of these instruments in different market environments, as well as to assess their present cheapness.

In this section, we complement the indications from historical analysis with our view regarding inflation in the coming quarters, to analyze expected BTPi returns under alternative scenarios.

We select the end of October 2020 as our investment horizon, which is long enough to represent a medium-term holding period. Furthermore, this date is still within our forecasting horizon, so we can use in-house data for expected inflation. Incidentally, this is also the coupon date for the BTPi Oct24.

Starting with inflation, our forecasts for the coming years are significantly different from those priced in by markets (see Euro Inflation Update, 24 June, for more details). We evaluate the performance of the BTPi Oct24 under our central scenario as well as in two alternative scenarios in which inflation is 100bp higher and 100bp lower.

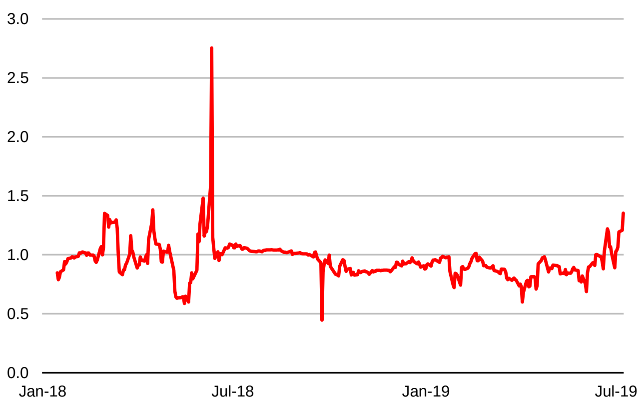
**CHART 7: FOI, UCG EXPECTATIONS AND BREAKEVEN OF BTP-I**




Source: Bloomberg, UniCredit Research

In addition to inflation forecasts, we need an input for rates. We use as a baseline an agnostic scenario, with the curve unchanged, so that the BTPi Oct24 earns the rolldown over the investment horizon. We also consider an alternative scenario where rates are 50bp lower and one where rates are 50bp higher (this last case is closer to our forecasts). Finally, we benchmark the expected return of the BTPi with the nominal curve. To do this, we need to estimate the relationship between changes in real yields and changes in the nominal yields. Chart 8 helps us to do so, showing the beta of nominal yields relative to the (adjusted) real yield of the BTPi Oct24, using a rolling window of 75 days.

**CHART 8: BETA OF NOMINAL YIELDS RELATIVE TO REAL YIELDS**




Median:0.95, top and bottom 5% are 0.75 and 1.25

Source: Bloomberg, UniCredit Research

We select beta=1 as the baseline, as this has been the most common value observed during the last year. We also consider an upper and lower bound at 1.25 and 0.75, which represent the empirical top and bottom 5% of the empirically observed betas.

Having all the necessary inputs, we can now calculate the expected returns under the various scenarios. We start by focusing only on the BTPi. The following table shows the expected returns.

**TABLE 3: EXPECTED RETURN OF BTPI OCT24**

| | | Inflation | | |
|---|---|---|---|---|
| | Yld shock | 1pp lower | Baseline | 1pp higher |
| Current yld: 0.88% | **-50bp** | 2.7% | 4.1% | 5.0% |
| Estimated rolldown over the horizon : 15bp | **-** | 1.1% | 2.6% | 3.4% |
| | **+50bp** | -0.4% | 1.1% | 1.9% |

Source: Bloomberg, UniCredit Research

Under our baseline scenario for inflation and assuming an unchanged curve, the BTPi would have an expected return of around 2.5%. Such a high expected return is mostly due to the fact that markets are pricing in an inflation level significantly lower than our expectations. Indeed, in this scenario, half of the BTPi expected return would come from inflation compensation.

In a (bond) bullish market, the BTPi would have an even better return. In particular, the table indicates that a 50bp decline in real yields (in addition to the expected rolldown) would be enough to offset a 1pp undershooting of inflation relative to our forecasts.

The most favorable scenario is if real yields decline (for example as a result of QE) while inflation overshoots our expectations.

The only negative number in the table arises from a scenario in which real yields go up while inflation remains persistently weak. This could happen, for example, in case of another repricing in credit risk, weighing on financial conditions and resulting in weaker economic growth and, hence, inflation.

What can be said about the relative performance of BTPi versus nominal BTPs? Table 4 combines the expected return of the BTPi Oct24 with the expected return of the BTP 1.45% Nov24, under three different assumptions for the beta. Clearly, the relative performance mostly depends on the behavior of nominal yields relative to real yields. The results are summarized below.

**TABLE 4: BTPI OCT24 VS. BTP NOV24 – SCENARIO ANALYSIS**

| | | Inflation | | |
|---|---|---|---|---|
| | Yld shock | 1pp lower | Baseline | 1pp higher |
| **Beta=0.75** | | | | |
| | 0.5% lower | -0.2% | 1.3% | 2.1% |
| | - | -1.2% | 0.2% | 1.0% |
| | 0.5% higher | -0.3% | 1.1% | 1.9% |
| **Beta=1** | | | | |
| | 0.5% lower | -0.7% | 0.8% | 1.6% |
| | - | -1.2% | 0.2% | 1.0% |
| | 0.5% higher | 0.1% | 1.6% | 2.4% |
| **Beta=1.25** | | | | |
| | 0.5% lower | -1.2% | 0.3% | 1.1% |
| | - | -1.2% | 0.2% | 1.0% |
| | 0.5% higher | 0.6% | 2.1% | 2.9% |

Source: UniCredit Research

The first point to note is that under our baseline assumption for inflation, or if inflation is even higher, the BTPi always outperforms the nominal BTP. The most favorable scenario for the BTPi is if yields go up, nominal yields respond with a high beta (which would reflect increasing inflation expectations) and inflation comes out strong. Such a scenario would correspond to a "recovery and normalization". This is certainly not the most likely outcome, in our view.

The first column shows returns in the scenario in which inflation undershoots our expectations (which is less favorable for BTPis). Even in this case, the BTPi Oct24 can achieve a better return than nominal bonds, and this happens particularly if yields rise.

Table 4 suggests that BTPis in the 5-year area will outperform BTPs under most scenarios.

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