



Rabobank

# What rising yields mean for Italy

Special

**RaboResearch**  
Global Economics &  
Markets  
mr.rabobank.com

[Maartje Wijffelaars](#)  
Senior Economist  
Eurozone  
+31 6 225705639

[Elwin de Groot](#)  
Head of Macro Strategy  
+31 30 7121322

[Felix Beckebanze](#)  
Data Scientist

## Contents

Entering a new chapter with rising interest costs...	1	Policy uncertainty could push yields higher	5
...but no revival of the debt crisis, yet	2	Monetary policy framework, then and now	6
Debt metrics, then and now	3		

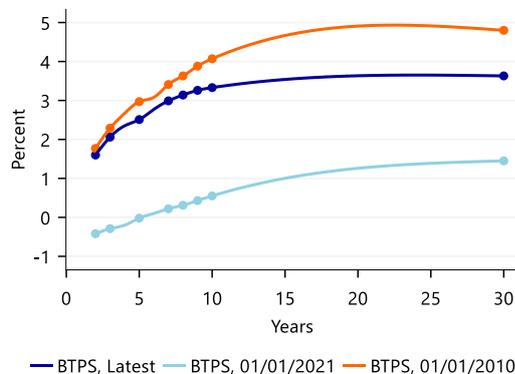
## Summary

- Bond yields and spreads in the Eurozone have been on the ascend.
- Italy is particularly vulnerable given its enormous debt pile and track record of weak growth.
- Although the ECB has moved into 'spread-containment' mode, we are very sceptical about its ability to cap spreads, whilst in any case Italian yields are unlikely to come down.
- This means that the Italian government will have to deal with higher debt servicing costs on its massive debt load going forward.
- We argue that at this point in time, while clearly being a headwind for fiscal policy, the rise in yields still seems bearable in the short to medium run.
- In three to four years' time, however, debt affordability could become an issue, with the interest payments-to-revenue passing the 10% threshold, if current forward rates materialise.
- A jump in yields back to the June peak or even to sovereign debt crisis episodes, would rather substantially bring forward both affordability and sustainability challenges.
- One event possibly driving bond yields higher are 2023 elections or even snap-elections.

## Entering a new chapter with rising interest costs...

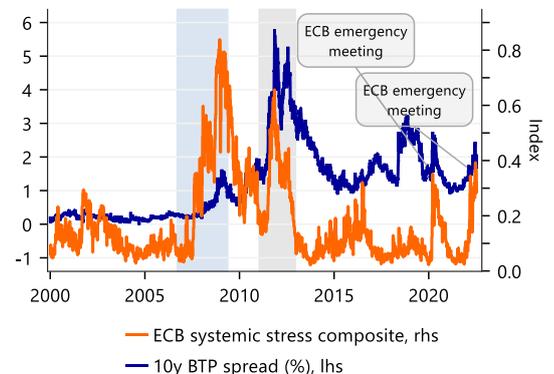
After some two years of relative calm, bond yields and spreads in the Eurozone have been on the ascend again. Rising inflation, a very soon-to-be-tightened monetary policy and a weak economic outlook are among the drivers behind higher market rates and uncertainty or risk premiums.

**Figure 1: Italian sovereign yield curve – huge shift since mid-2021**



Source: Macrobond

**Figure 2: Systemic risk spurred ECB into action (or was it 'il spread?')**



Source: Macrobond

Whilst monetary tightening has an impact on bond yields across the Euro bloc, differences in debt metrics become more important again in the environment described above. **Given its enormous debt pile, its track record of sluggish growth and history of political instability, Italy is particularly vulnerable in times like these.** Hence, while yields on 10-year German bunds have

increased by some 150 basis points since the start of 2022, those on Italian BTPs have risen by as much as 210 bp. Mid-June, Italian yields briefly touched their highest stance since 2014. Meanwhile, last time that the Bund-BTP spread reached those mid-June levels of around 240bp was May 2020 when the first Covid-19 pandemic wave was in full swing.

**Although recent volatility has spurred the ECB into ‘spread-containment’ mode, we note that it’s resolve may yet be tested by markets whilst any spread-control does not preclude ongoing yield pressures** (see also [here](#) and [here](#)). And both can cause headaches. Rising spreads, for example, can hurt the transmission of monetary policy by the ECB and become self-fulfilling at some point, driving yields of peripheral countries ever higher. Higher yields, in turn, clearly make it more expensive for a government to finance its debt.

At the point where yields on new government debt are higher than on maturing debt, higher interest payments start eating into other expenditure and/or would lead to (faster) debt increases further down the line- since the government would need to increase its total borrowing to both fund increased interest payments and ongoing other existing expenditures.

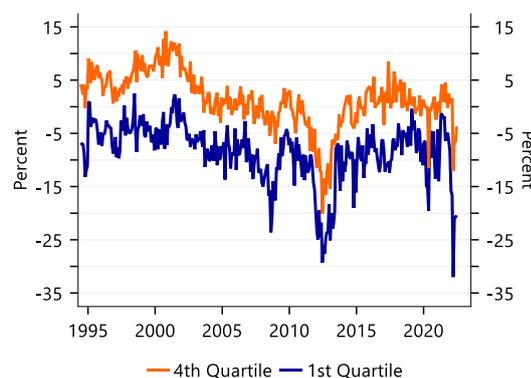
## ...but no revival of the debt crisis, yet

In this special we specifically focus on what the rise in yields means for the Italian government’s interest costs, affordability and sustainability. We argue that at this point in time, while clearly being a headwind for fiscal policy, the rise in yields still seems bearable in the short to medium run. That is, in the absence of unwarranted risk premiums and under the assumption that the current European/Italian political status quo does not change abruptly.

**In three to four years’ time, however, debt affordability could become an issue.** We will look into this in more detail below, but if current expected yield levels (14 July), as reflected in forward rates, materialise, Italy’s interest payments as a percent of its government revenues, would exceed 10% by around 2026/’27. This is a threshold often used by the credit rating agencies to measure affordability. This is not to say that the increase doesn’t matter now already. It obviously makes government spending more expensive and will likely lead to fiscal tightening or less spending on other expenditures than interest further down the road. Moreover, it also makes borrowing and hence investments for corporates more expensive, hurting economic growth.

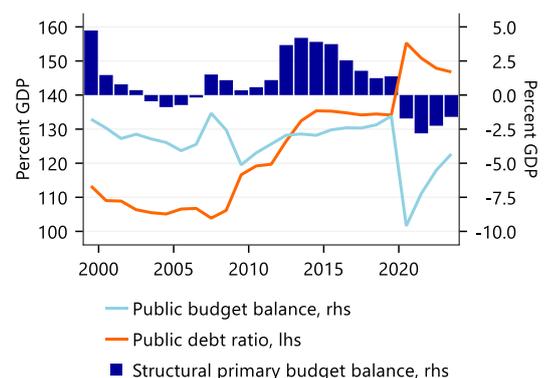
Lower growth is of course the purpose of tightening monetary policy, in order to get inflation back under control. The inconvenient truth, this time around, however, is that it will be more difficult to tame inflation by suppressing demand, given the [supply-driven nature of inflation](#). It’s the type of inflation that is generally of the unwanted kind: it raises prices but lowers output. Meanwhile, just like in many other member states, lower-income households are struggling with rising energy bills. Households in the lowest income quartile earlier this year were more negative about their expected financial situation than at any time in the past 20 years (see figure below).

**Figure 3: Italy: Consumer confidence: financial situation over next 12 months – by income**



Source: Macrobond

**Figure 4: By some measure, Italy’s debt metrics are worse now than in 2010**



Source: Macrobond, DG ECFIN projections

## Debt metrics, then and now

The very sharp rise in interest rates in less than one year has revived memories of the sovereign debt crisis. But today is not 2011. Although some parallels can be drawn, several things have changed, some for the better, others for the worse.

At face value, Italy's **debt-to-GDP** ratio is much higher now; its **yield curve** has been approaching the levels seen in the heady 2010s (Figure 1, although ultra long rates are still some 100bp below their levels back then). And its **structural primary balance** has been consistently below zero since the pandemic struck. This is worse than before the onset of the 2010-12 European sovereign debt crisis (Figure 4).

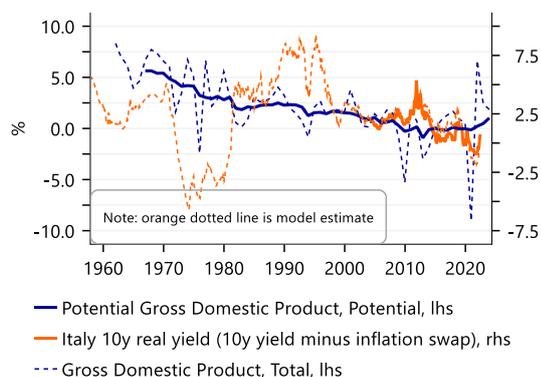
The well-known (**long-term**) **debt sustainability condition** implies that the government's primary surplus (i.e., the budget balance excluding interest payments) should be equal (or higher) than the outstanding public debt-to-GDP ratio times the difference between the effective real interest paid on existing debt and the real GDP growth rate. If not, the ratio of debt-to-GDP will explode. This, of course, is only a simplistic and long-term condition and it's not an early-warning indicator. But it is insightful nevertheless.

A quick glance at these parameters shows that – for now – Italy's GDP growth rate (or prospective growth rate, Figure 5) exceeds the inflation-adjusted yield on its bonds. Note, also, that the country's true interest costs will lag and are much smoother due to the maturity of its debt. Nevertheless, its lacklustre growth performance since 2000 (with barely any growth in GDP) highlights the case for containing real yields.

Recent reforms on the labour market and judiciary and considerable investments financed by loans and grants from the EU's 672.5bn RRF (of which Italy is receiving the considerable sum of EUR 191.5bn) hold out the prospect of a higher growth rate in the coming years, but the worsening cyclical backdrop due to the energy crisis could still spoil things. Moreover, the current type of inflation the country is experiencing is not the favourable kind: purely technically it leads to a lower debt-GDP ratio, if all else is kept unchanged. But the negative terms of trade shock that is behind that rise in inflation arguably takes the shine off that observation.

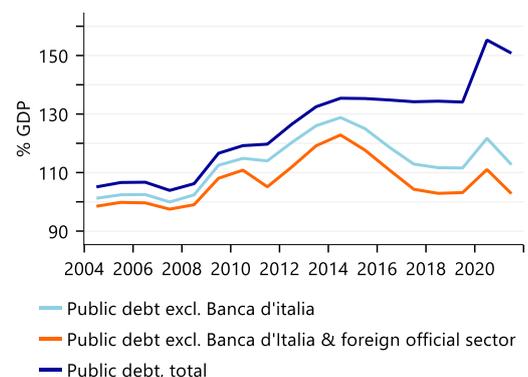
Another metric often used in debt sustainability analyses is **financing needs**. The IMF and European Commission, for example, generally foresee debt sustainability issues if financing needs are higher than 15% of GDP in the short run, and/ or exceed 20% in the longer run. Financing needs consist of refinancing maturing debt and the issuance of new debt to fund its primary deficit and interest payments. If we assume current debt is rolled over at maturity and the primary deficit gradually moves back to a small surplus in the second half of this decade, gross financing needs will consistently be close to or somewhat higher than 20% of GDP over the next ten years.

**Figure 5: Italian 'real yield' still below real GDP growth**



Source: RaboResearch, Bloomberg, Ameco

**Figure 6: Gov. debt-to-GDP excluding debt held by the Eurosystem is lower than pre-debt crisis**



Source: Macrobond, IMF, Eurostat, RaboResearch

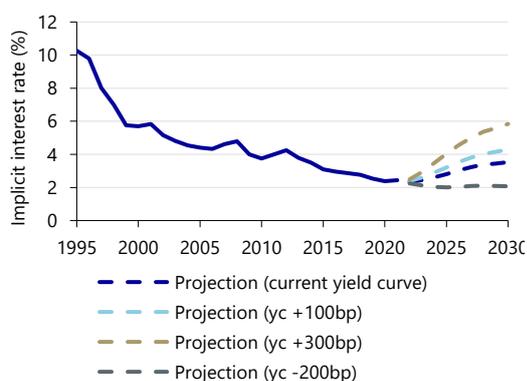
That said, there is also **a factor that alleviates concerns**. Although Italy's debt-to-GDP ratio has risen significantly since the Eurozone debt crisis, all of that increase -and even more- has 'ended up' on the Eurosystem's (ECB + Banca d'Italia) balance sheet. The interest payments made to Banca d'Italia will ultimately flow back to the Italian government<sup>1</sup>. Moreover, with the ECB likely to continue to reinvest its bond portfolio for years to come, that part of Italy's gross financing needs is pretty much guaranteed. As such, we can take this portfolio -approximately a quarter of total debt- out of the equation (Figure 6).<sup>2</sup> This means that financing needs to be fulfilled by private investors would drop to around the 15% threshold for the rest of this decade. This clearly alleviates, but not completely removes challenges ahead.

## Projecting interest rate costs

We now zoom in on what the recent rise in yields implies for future interest costs for the Italian government. Since markets have been very volatile and the ECB is now facing a 'stagflationary' environment that clouds the interaction between its monetary policy instruments, we also look at a positive and a negative scenario.

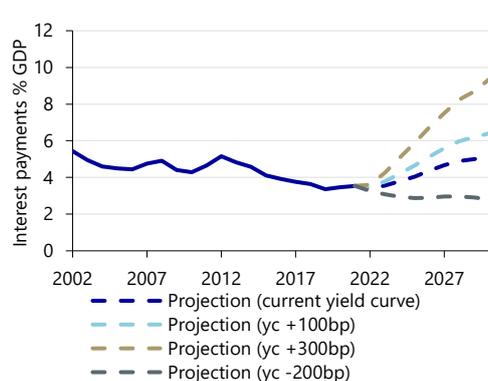
For our calculations we had to make several assumptions. An important assumption is that bonds will be re-issued at the same tenor when they redeem, with a new coupon equal to the future spot rate. Based on the forward rates, yields on new debt will on average be higher than those on maturing debt<sup>3</sup>. We combine this with a negative yet improving primary balance in the years until 2027, as projected by the IMF, and a positive balance thereafter -in line with the average between 2002 and 2019. **In such an environment, the implicit (average) yield on Italian government debt is projected to rise from 2.4% in 2021 to 3.5% in 2030 (Figure 7). Accordingly interest payments would increase from 3.5% of GDP in 2021 to 5.2% of GDP in 2030, requiring a larger primary surplus to keep the debt-to-GDP ratio in check.** To keep the debt-to-GDP ratio at its (projected) 2022 level, a primary balance of around -0.5% of GDP is required in the coming few years moving towards +1.5% in the final years of this decade. This compares to a primary balance of -3.7% last year and +1.3% on average between 2002 and 2019.

**Figure 7: Implicit interest rate**



Note: Current yield curve stems from 14 July  
Source: Macrobond, Bloomberg, RaboResearch,

**Figure 8: Interest payments as % of GDP**



Note: Current yield curve stems from 14 July  
Source: Macrobond, Bloomberg, RaboResearch

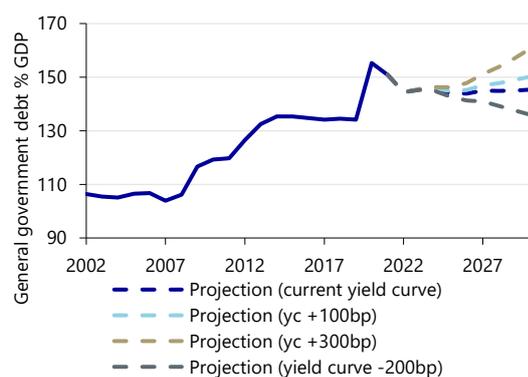
<sup>1</sup> Although this has never been explicitly said so, we assume that the risk-sharing agreement in the Eurosystem (with 80% of the risk of national bond purchases falling with the NCB) also implies 80% profit sharing. The remainder (20%) would be distributed in a pro-rata fashion. As such, the majority of interest revenues still flows back to Banca d'Italia.

<sup>2</sup> The ECB intends to continue reinvesting the maturing bonds purchased under its APP for "an extended period of time past the date when it starts raising the key ECB interest rates and, in any case, for as long as necessary to maintain ample liquidity conditions and an appropriate monetary policy stance", whilst it will reinvest maturing securities purchased under its PEPP until, at least, end-2024.

<sup>3</sup> We derived the total interest costs from the modelled BTP costs by using the current ratio of 70% for BTP debt over the total Italian debt (BTPs, other notes/instruments and loans).

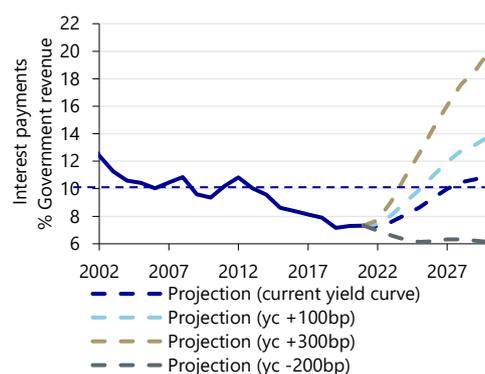
Another important metric to keep an eye on is **interest payments as a percentage of government revenues**. The higher that ratio, the lower debt affordability. Debt affordability can be described as *the extent to which current and future debt payment obligations can be met without introducing measures that substantially harm growth, welfare or quality of ongoing public services*. According to credit rating agencies, debt affordability becomes at risk if interest over revenue is higher than 10%. Figure 8 shows that that ratio was above -or very close to- the threshold in the two decades prior to 2015, after which it declined. Yet based on the assumptions above, while projecting revenue as a % of GDP at the average of between 2009 and 2019, its stands to rise again, reaching 10.0% in 2027.

Figure 9: Debt ratio



Note: Current yield curve stems from 14 July  
Source: Macrobond, Bloomberg, RaboResearch

Figure 10: Interest payments as % of revenues



Note: Current yield curve stems from 14 July  
Source: Macrobond, Bloomberg, RaboResearch

## A sensitivity analysis: what if bond yields alter course

Given that the trajectories depend on multiple assumptions, we have run multiple sensitivity analysis. One of the most interesting is what happens with the above mentioned indicators if bond yields jump or fall substantially.

Figures 7-10 show what would happen to the implicit interest rate, interest payments as a % of revenue and GDP, and the debt-to-GDP trajectory, respectively if the yield curve would shift. We have drawn scenarios in which yields jump 100 basis points across the curve and hence move back to their June peak; jump 300bp to more or less mimic the average during the heat of the sovereign debt crisis; and fall 200bp to move back to the start of 2022. The impact of such higher yields would be substantial for all these indicators. For example, **the pain threshold for debt affordability would be hit already in 2024 or 2025, whilst financing needs -corrected for ECB repurchases- would pass the short-term unsustainability threshold by a wider margin**. In the most severe scenario, Italy would also fail to stay below the longer-term threshold by the end of this decade.

Finally, **a 100bp (300bp) jump in yields would push the required primary balance to stabilise the debt-to-GDP ratio from -0.5% to 0% (0.5%) in the short run and from 1.5% to 2.5% (4%) in the longer run**. It needs no explanation that this would pose an even larger challenge .

Other sensitivity analysis, including, for example, different paths of the primary balance, government revenues and GDP growth are available upon request.

## Policy uncertainty could push yields higher

Apart from ECB policy and economic performance, **2023 elections or even snap-elections this year could be a driver of higher bond yields**. We have seen in the past that political uncertainty, perceived irresponsible fiscal policy, resulting clashes between the government and the European Commission, and distorted personal relationships can push Italian yields higher. For now, the fact

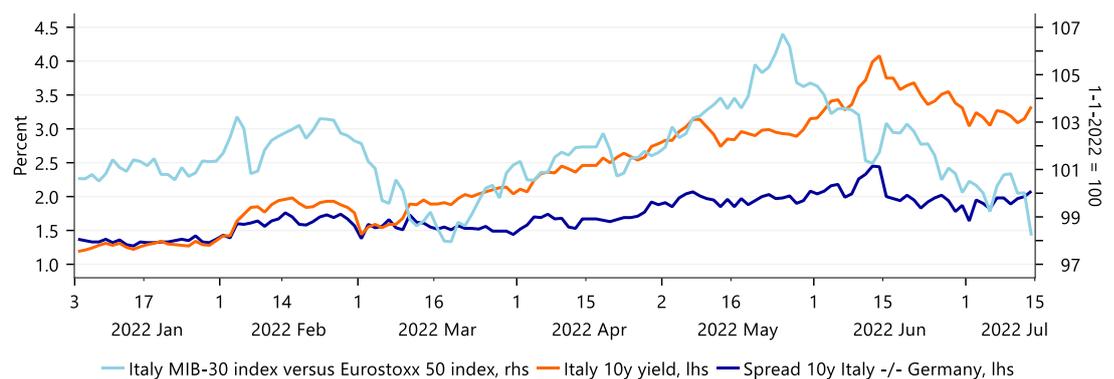
that European budget rules do not apply and the warm relationship between Italian PM Draghi and other EU leaders, are keeping clashes between Italy and the rest of the block at bay.

Yet the upcoming elections could spark fear of clashes in the future. Polls suggest that the far-right Brothers of Italy would come out on top if elections would be held right now. Recent developments on the left and the worsening financial position of households only strengthen their chances of winning the elections, since they are the only opposition party. A Brothers' win need not result in a Brothers government per se, but let's assume that it does. While highly unlikely to call for an EU or euro-exit -especially in light of Recovery fund money- Brothers of Italy is more Eurosceptic than most other parties, and certainly more sceptic than the current Draghi government. In that sense, frictions between Italy and the EU/ Eurozone would likely increase under a Brothers' government. Especially, once the EU budget rules get back into play and the government would need to implement austerity measures. That said, the pile of Recovery money might persuade even Brother's to implement just enough reforms to receive hard-needed money from the fund. Just as it has led to Lega softening its tone.

In any case, **the road to elections is likely to be littered with hefty campaigning** and parties like M5S and Lega to soften their support for Draghi, to get protest voters back in their camp. In fact this process has already started this year with Lega's Salvini warning that he may decide on staying in the coalition during his annual party congress on 18 September. Similarly, absence of Draghi's other coalition partner, in a vote of confidence yesterday, is clear evidence that the race for the Italian voters is heating up.

In reaction to M5S snubbing the vote, Draghi has handed over his resignation to President Mattarella -even though he survived the confidence vote. He argued he could no longer implement the government agenda as intended. At the moment of writing, it is still unknown whether Draghi will adhere to Mattarella's request to speak to parliament, to see if he could still stay on as PM of a government of national unity or if snap elections will have to be called. Whatever happens in the coming hours and days, it is a given that political uncertainty is to increase over the coming months, possibly pushing yields higher. Yesterday's market closing and this morning's market opening give some indication that markets dislike political uncertainty in Italy, with spreads and 10-year yields up more than 20 bps since Wednesday.

**Figure 11: Spreads and bond yields on the rise again; equities underperforming**



Source: Macrobond, Bloomberg

## Monetary policy framework, then and now

Since the advent of the sovereign debt crisis, the ECB has launched a slew of instruments to deal with sub-par inflation and/or fragmentation risks. Most of these instruments (and that includes, TLTROs, APP/PEPP, OMT) could potentially still be used in future crises. However, the economic circumstances have changed quite drastically since the pandemic -whilst OMT remains an unused politically loaded instrument government leaders are hesitant to request.

Pandemic support in Europe (in essence massive budgetary support financed to a large extent by the central bank) has proved relatively successful, but is now one of the reasons for severe mismatch problems in goods markets and the labor market (including tight labor markets in many member states). This has been aggravated by a huge global energy and food supply shock, which gathered momentum in 2021 and which took a turn for the worse with the war in the Ukraine.

This means that the ECB is now facing an entirely different economy in which demand-management becomes ineffective and, with persistently high inflation (as is probably already the case right now), even entirely inappropriate. But by turning towards a tightening of monetary policy through hiking policy rates, a process which began late 2022, the ECB is also contributing to fresh spread widening pressures. In so far as spreads are persistent or set to widen even further, the one-size monetary policy is likely to lead to more demand and economic growth destruction in Italy than Germany, for example. In this regard, ECB President Lagarde, in her speech on 6 June, noted that the *"ECB must preserve the transmission of monetary policy to the entire Eurozone, and must therefore ensure that there is no fragmentation preventing this"*. She added: *"We have existing instruments, we have described them in the past. PEPP reinvestments, with total flexibility if warranted across time, jurisdiction. And if it is necessary, as we have amply demonstrated in the past, we will deploy either existing -and adjusted- instruments, or new ones."*

## Transmission Protection Mechanism faces real challenges

With the Council under strong pressure to deliver rate hikes (the weakness of the euro is one factor there), this only underscores that a strong anti-fragmentation tool is needed to ensure an orderly hiking cycle, while such an instrument may not have been necessary without any hikes. [We believe the new anti-fragmentation tool](#), currently dubbed the 'Transmission Protection Mechanism' (TPM) will come with relatively light conditionality and without a predetermined purchase cap, even though this requires some convincing of the hawks. To avoid interference with the inflation mandate, we expect liquidity draining operations to offset any purchases.

However, making it credible and making it work is far from a given, as the Council will have to balance the TPM's ability to preserve the transmission of monetary policy evenly across the Eurozone with political palatability and risks of moral hazard, while also avoiding that the instrument impedes on the overall policy stance and inflation mandate. This creates a real risk that the TPM's design will disappoint, either because the tool is too limited in scope, or because of the perception that it may never be used.

In other words, you can twist the ECB's instruments or even turn them upside down, but the bottom line is that all its instruments remain 'demand' oriented and unable to cope with what essentially is a supply shock. Moreover, [our Rates colleagues think](#) that, certainly in its first iteration, it is very unlikely that the new TPM will be able to cap EGB spreads and yields, suggesting that the Italian government will have to deal with higher debt servicing costs on its massive debt load going forward.

## **RaboResearch**

Global Economics & Markets  
mr.rabobank.com

### **Global Head**

---

#### **Jan Lambregts**

+44 20 7664 9669  
Jan.Lambregts@Rabobank.com

### **Macro Strategy**

#### **Global**

---

#### **Michael Every**

Senior Macro Strategist  
Michael.Every@Rabobank.com

#### **Europe**

---

#### **Elwin de Groot**

Head Macro Strategy  
Eurozone, ECB  
+31 30 712 1322  
Elwin.de.Groot@Rabobank.com

#### **Stefan Koopman**

Senior Macro Strategist  
UK, Eurozone  
+31 30 712 1328  
Stefan.Koopman@Rabobank.com

#### **Teeuwe Mevissen**

Senior Macro Strategist  
Eurozone  
+31 30 712 1509  
Teeuwe.Mevissen@Rabobank.com

#### **Bas van Geffen**

Senior Macro Strategist  
ECB, Eurozone  
+31 30 712 1046  
Bas.van.Geffen@Rabobank.com

#### **Erik-Jan van Harn**

Macro Strategist  
Germany, France  
+31 6 300 20 936  
Erik-Jan.van.Harn@Rabobank.nl

#### **Maartje Wijffelaars**

Senior Economist  
Italy, Spain, Portugal, Greece  
+31 88 721 8329  
Maartje.Wijffelaars@Rabobank.nl

#### **Wim Boonstra**

Senior Advisor  
  
+31 30 216 2666  
Wim.Boonstra@Rabobank.nl

#### **Americas**

---

#### **Philip Marey**

Senior Macro Strategist  
United States, Fed  
+31 30 712 1437  
Philip.Marey@Rabobank.com

#### **Christian Lawrence**

Senior Cross-Asset Strategist  
Canada, Mexico  
+1 212 808 6923  
Christian.Lawrence@Rabobank.com

#### **Mauricio Une**

Senior Macro Strategist  
Brazil  
+55 11 5503 7347  
Mauricio.Une@Rabobank.com

#### **Gabriel Santos**

Macro Strategist  
Brazil  
+55 11 5503 7288  
Gabriel.Santos@Rabobank.com

### **FX Strategy**

---

#### **Jane Foley**

Head FX Strategy  
G10 FX  
+44 20 7809 4776  
Jane.Foley@Rabobank.com

#### **Christian Lawrence**

Senior Cross-Asset Strategist  
LatAm FX  
+1 212 808 6923  
Christian.Lawrence@Rabobank.com

## Rates Strategy

---

### Richard McGuire

Head Rates Strategy

+44 20 7664 9730

Richard.McGuire@Rabobank.com

### Lyn Graham-Taylor

Senior Rates Strategist

+44 20 7664 9732

Lyn.Graham-Taylor@Rabobank.com

## Credit Strategy & Regulation

---

### Matt Cairns

Head Credit Strategy & Regulation

Covered Bonds, SSAs

+44 20 7664 9502

Matt.Cairns@Rabobank.com

### Bas van Zanden

Senior Analyst

Pension funds, Regulation

+31 30 712 1869

Bas.van.Zanden@Rabobank.com

### Paul van der Westhuizen

Senior Analyst

Financials

+31 88 721 7374

Paul.van.der.Westhuizen@Rabobank.com

### Cas Bonsema

Senior Analyst

ABS, Covered Bonds

+31 6 127 66 642

Cas.Bonsema@Rabobank.com

## Agri Commodity Markets

---

### Carlos Mera

Head of ACMR

+44 20 7664 9512

Carlos.Mera@Rabobank.com

### Michael Magdovitz

Senior Commodity Analyst

+44 20 7664 9969

Michael.Magdovitz@Rabobank.com

## ***Client coverage***

### **Wholesale Corporate Clients**

Martijn Sorber	Global Head	+31 30 712 3578	Martijn.Sorber@Rabobank.com
Hans Deusing	Europe	+31 30 216 9045	Hans.Deusing@Rabobank.com
Neil Williamson	North America	+1 212 808 6966	Neil.Williamson@Rabobank.com
Adam Vanderstelt	Australia, New Zealand	+61 2 8115 3102	Adam.Vanderstelt@rabobank.com
Ethan Sheng	Asia	+852 2103 2688	Ethan.Sheng@Rabobank.com
Ricardo Rosa	Brazil	+55 11 5503 7150	Ricardo.Rosa@Rabobank.com

### **Financial Institutions**

#### ***Short-term Interest Rates***

Marcel de Bever	Global Head	+31 30 216 9740	Marcel.de.Bever@Rabobank.com
-----------------	-------------	-----------------	------------------------------

#### ***Bonds & Interest Rate Derivatives***

Henk Rozendaal	Global Head Fixed Income	+31 30 216 9423	Henk.Rozendaal@Rabobank.com
----------------	--------------------------	-----------------	-----------------------------

#### ***Solutions***

Sjoerd van Peer	Global Head	+31 30 216 9072	Sjoerd.van.Peer@Rabobank.com
-----------------	-------------	-----------------	------------------------------

#### ***Relationship Management***

Rogier Everwijn	Global Head	+31 30 712 2440	Rogier.Everwijn@Rabobank.com
Rob Eilering	Banks	+31 30 712 2162	Rob.Eilering@Rabobank.com
Petra Schuchard	Insurers		Petra.Schuchard@Rabobank.com
Duurt Jan van Dijk	Asset Managers	+31 30 712 2389	DuurtJan.van.Dijk@Rabobank.com
Javier Alvarez de Eerens	MDB	+31 30 712 1015	Javier.Alvarez@Rabobank.com
Christel Kleinhaarhuis	Fintech		Christel.Klein.Haarhuis@Rabobank.com

### **Capital Markets**

Herald Top	Global Head	+31 30 216 9501	Herald.Top@Rabobank.com
Christopher Hartofilis	Capital Markets USA	+1 212 808 6890	Christopher.Hartofilis@Rabobank.com
Ian Baggott	Capital Markets Asia	+852 2103 2629	Ian.Baggott@Rabobank.com
Willem Kröner	Global Head ECM	+31 30 712 4783	Willem.Kroner@Rabobank.com
Harman Dhami	DCM Syndicate	+44 20 7664 9738	Harman.Dhami@Rabobank.com
Crispijn Kooijmans	DCM FIs & SSAs	+31 30 216 9028	Crispijn.Kooijmans@Rabobank.com
Bjorn Alink	DCM Securitisation & Covered Bonds	+31 30 216 9393	Bjorn.Alink@Rabobank.com
Othmar ter Waarbeek	DCM Corporate Bonds	+31 30 216 9022	Othmar.ter.Waarbeek@Rabobank.com
Joris Reijnders	DCM Corporate Loans	+31 30 216 9510	Joris.Reijnders@Rabobank.com
Brian Percival	DCM Leveraged Finance	+44 20 7809 3156	Brian.Percival@Rabobank.com

---

## Disclaimer

### Non Independent Research

This document is issued by Coöperatieve Rabobank U.A. incorporated in the Netherlands, trading as “Rabobank” (“Rabobank”) a cooperative with excluded liability. The liability of its members is limited. Authorised by De Nederlandsche Bank in the Netherlands and regulated by the Autoriteit Financiële Markten. Rabobank London Branch (RL) is authorised by De Nederlandsche Bank, the Netherlands and the Prudential Regulation Authority, and subject to regulation by the Financial Conduct Authority and limited regulation by the Prudential Regulation Authority. Further details are available on request. RL is registered in England and Wales under Company no. FC 11780 and under Branch No. BR002630. This document is directed exclusively to Eligible Counterparties and Professional Clients. It is not directed at Retail Clients.

This document does not purport to be impartial research and has not been prepared in accordance with legal requirements designed to promote the independence of Investment Research and is not subject to any prohibition on dealing ahead of the dissemination of Investment Research. This document does NOT purport to be an impartial assessment of the value or prospects of its subject matter and it must not be relied upon by any recipient as an impartial assessment of the value or prospects of its subject matter. No reliance may be placed by a recipient on any representations or statements made outside this document (oral or written) by any person which state or imply (or may be reasonably viewed as stating or implying) any such impartiality.

This document is for information purposes only and is not, and should not be construed as, an offer or a commitment by RL or any of its affiliates to enter into a transaction. This document does not constitute investment advice and nor is any information provided intended to offer sufficient information such that it should be relied upon for the purposes of making a decision in relation to whether to acquire any financial products. The information and opinions contained in this document have been compiled or arrived at from sources believed to be reliable, but no representation or warranty, express or implied, is made as to their accuracy, completeness or correctness.

The information contained in this document is not to be relied upon by the recipient as authoritative or taken in substitution for the exercise of judgement by any recipient. Any opinions, forecasts or estimates herein constitute a judgement of RL as at the date of this document, and there can be no assurance that future results or events will be consistent with any such opinions, forecasts or estimates. All opinions expressed in this document are subject to change without notice.

To the extent permitted by law, neither RL, nor other legal entities in the group to which it belongs accept any liability whatsoever for any direct or consequential loss howsoever arising from any use of this document or its contents or otherwise arising in connection therewith.

Insofar as permitted by applicable laws and regulations, RL or other legal entities in the group to which it belongs, their directors, officers and/or employees may have had or have a long or short position or act as a market maker and may have traded or acted as principal in the securities described within this document (or related investments) or may otherwise have conflicting interests. This may include hedging transactions carried out by RL or other legal entities in the group, and such hedging transactions may affect the value and/or liquidity of the securities described in this document. Further it may have or have had a relationship with or may provide or have provided corporate finance or other services to companies whose securities (or related investments) are described in this document. Further, internal and external publications may have been issued prior to this publication where strategies may conflict according to market conditions at the time of each publication.

This document may not be reproduced, distributed or published, in whole or in part, for any purpose, except with the prior written consent of RL. By accepting this document you agree to be bound by the foregoing restrictions. The distribution of this document in other jurisdictions may be restricted by law and recipients of this document should inform themselves about, and observe any such restrictions.

A summary of the methodology can be found on our [website](#)

© Rabobank London, Thames Court, One Queenhithe, London EC4V 3RL +44(0) 207 809 3000