European Rates Viewpoint

The ECB's cost minimisation problem

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ECB to strive to reduce costs...

The ECB is actively thinking about reducing the remuneration cost of its liabilities, currently driving it to a €56-70bn 2024E loss. After its latest minimum reserve remuneration change, we believe the likelihood of remuneration rate changes on government and non-euro area resident deposits to 0% is very high. We present four scenarios dependent on whether more remuneration changes are made and whether the ECB will hike in September. All scenarios imply Eurosystem losses in 2024.

... risks front-end rates distortion...

Further cuts to deposit remuneration at the central bank pose risks of distortion to front-end rates, in particular repo richening, short-dated swap spread widening, and EUR FX- Sofr basis widening. If the ECB were to consider punitive tiering, we estimate 10-11x minimum reserves may be subject to 0% to fully negate losses. But the associated distortions from reserve remuneration changes will be meaningfully larger than changes to government and non-euro area resident deposits.

... and damaging the effectiveness of its actions and job

We argue that the ECB's move risks damaging the effectiveness of the central bank's actions and job. This is the central bank version of an inheritance tax, which is collected without distorting incentives. But is this the end of it? Our scenario analysis shows there is a large gap to cover, hence there will be a temptation to do more. If the market sees it this way it risks: (1) creating doubts about many other aspects of the balance sheet that could damage the transmission down the line; and (2) make some wonder whether mandatory reserves can be part of monetary policy proper.

It also points to an earlier end to PEPP reinvestments...

Beyond the likely change in remuneration of government deposits, the bar for active sales of APP holdings is high given it would crystalise losses. In a context in which there is some desire to increase the speed at which the ECB balance sheet unwinds, we think it is now likely PEPP reinvestments will stop earlier than in December 2024. It is more likely than not PEPP reinvestments, if spreads remain resilient, will stop sometime in mid-2024.

... and shows a loss of focus, taxing the banks

The market will likely worry on two fronts. First that instead of focusing on monetary policy, the ECB is focusing on accounting results, with the resultant diminution of its inflation credibility. Second, the cost of capital for banks will rise because the market will worry that the ECB will seek to fill the 'other' €56-70bn accounting hole from banks, such as through 10-11x higher mandatory reserves. A full extraction through such a tax would equate to a 25% reduction in euro area bank profits.

Abbreviations:

ECB = European Central Bank

Sofr = secured overnight financing rate

APP = asset purchase programme

PEPP = pandemic emergency purchase programme

€str = euro short-term rate

TLTRO = targeted longer-term refinancing operation

QE = quantitative easing

QT = quantitative tightening

GC = general collateral

HQLA = high quality liquid assets

Euribor = euro interbank offered rate

Eonia = euro overnight indexed average

Four scenarios for 2024

On 27 July 2023, the ECB announced it will reduce the remuneration rate on minimum reserves from the deposit facility rate to 0%. Part of its justification for the change was to reduce the amount of interest that it needs to pay on its liabilities:

> "Today's decision to reduce the remuneration on minimum reserves will preserve the effectiveness of monetary policy by maintaining the current degree of control over the monetary policy stance and ensuring the full pass-through of the Governing Council's interest rate decisions to money markets. **At the same time, it will improve the efficiency of monetary policy by reducing the overall amount of interest that needs to be paid on reserves in order to implement the appropriate stance.**" – ECB, July 2023

In our view, the change shows the ECB is actively thinking about reducing remuneration costs of its liabilities. We present four scenarios (Exhibit 1 and Exhibit 2) to illustrate the impact on the Eurosystem's net income in 2024 based on:

Remuneration changes on government and non-euro area resident deposits:

- **Further remuneration change**: The remuneration rate on government and non-euro area resident deposits would fall from c. €str minus 20bp to 0% from 1 January 2024. When this change is implemented, we assume total government deposits in the Eurosystem will fall to €100bn, and non-euro area resident deposits will fall to €50bn: these levels are comparable to those prior to June 2014, before the ECB introduced a negative deposit facility rate and when most government deposits were remunerated at 0%. The fall in government and non-euro area resident deposits will raise reserves.

- **No further remuneration change**: The remuneration rate on government and non-euro area resident deposits stays at c. €str minus 20bp. Government and non-euro area resident deposits are unchanged from current levels.

Policy rate profile:

- **No hike in September**: The ECB does not hike policy rates further and cuts policy rates by 25bp in June 2024, September 2024, and December 2024. This implies the deposit facility rate will be 3.75% in September 2023 and 3.00% in December 2024.

- **Hike in September**: The ECB raises policy rates by 25bp in September 2023 and cuts policy rates by 25bp in June 2024, September 2024, and December 2024. This implies the deposit facility rate will be 4.00% in September 2023 and 3.25% in December 2024.

Results

- **Scenario 1**: further remuneration changes and no hike in September. The Eurosystem makes a loss of €56bn in 2024.

- **Scenario 2**: no further remuneration changes and no hike in September. The Eurosystem makes a loss of c. €63bn in 2024.

- **Scenario 3**: further remuneration changes and hike in September. The Eurosystem makes a loss of c. €63bn in 2024.

- **Scenario 4**: no further remuneration changes and hike in September. The Eurosystem makes a loss of c. €70bn in 2024.

Exhibit 1: Scenario analysis of Eurosystem's net income in 2024, €bn
Scenarios based on deposit remuneration and policy rate profile

		Government and non-euro area resident deposits	
		Further remuneration change	**No further remuneration change**
Policy rate profile	**No hike in September**	-56 (Scenario 1)	-63 (Scenario 2)
	Hike in September	-63 (Scenario 3)	-70 (Scenario 4)

Source: BofA Global Research

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Exhibit 2: Scenario analysis of Eurosystem's net income details
Losses expected in all scenarios

	Scenario 1, €bn		Scenario 2, €bn		Scenario 3, €bn		Scenario 4, €bn	
	2023	**2024**	**2023**	**2024**	**2023**	**2024**	**2023**	**2024**
Income from assets (A)	90	80	90	80	90	80	90	80
Refi	0	0	0	0	0	0	0	0
TLTRO	10	6	10	6	10	6	10	6
QE portfolio	80	74	80	74	80	74	80	74
Cost of liabilities (B)	139	103	139	110	142	111	142	118
Current account (min reserves)	3	0	3	0	3	0	3	0
Deposit facility	122	103	122	97	125	111	125	104
Other euro area resident deposits	0	0	0	0	0	0	0	0
Government deposits	8	0	8	7	8	0	8	8
Non-euro area resident deposits	6	0	6	6	6	0	6	6
(C) = (A) - (B)	-49	-24	-49	-30	-52	-31	-52	-38
Amortisation adjustment (D)	-33	-33	-33	-33	-33	-33	-33	-33
Net income = (C) + (D)	-82	-56	-82	-63	-84	-63	-84	-70

Source: BofA Global Research

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Common assumptions

- No changes are made to the ECB's policy rate corridor.
- The ECB does not reinvest in its APP portfolio through the end of 2024. This would lead to an average monthly decline in APP holdings of c. €30bn. Full reinvestments are assumed in its PEPP portfolio through the end of 2024.
- Banks voluntarily repay 5% of TLTRO outstanding above and beyond maturities in each quarterly repayment window.
- The €str-depo spread gradually converges to 0bp by the end of 2024.
- The remuneration rate on minimum reserves will decrease from the deposit facility rate to 0% from 20 September 2023 as previously announced. No further changes on the remuneration of reserves are assumed. This would reduce remuneration costs by just c. €6bn in 2024.
- The remuneration rate on government and non-euro area resident deposits are the same, or very similar. Deposits of other euro area residents, i.e. institutions not subject to the minimum reserve requirement, are remunerated at 0%.
- The coupon rate on securities held for monetary policy purposes in each Member State is given by the par-weighted coupon of their outstanding government bonds. We do not account for higher coupons from inflation-linked bonds, which would pose upside risks to our net income calculations.
- If reserves net of minimum reserves in one Member State fall to zero, banks in that Member State will borrow reserves from banks in Germany.

- Banks move all reserves excluding required reserves to the deposit facility.
- Coins and banknote growth of 0.5% per month, which is taken out of reserves.
- We do not account for any potential mark-to-market loss on the Eurosystem's existing QE portfolio.
- QE holdings are carried at amortised cost by the Eurosystem. We assume the amortisation adjustments in 2023 and 2024 will be the same as those between April 2022 and March 2023, when the ECB stopped net purchases under PEPP and tapered net APP purchases to zero by July 2022. The amortisation adjustment under this assumption would be € -33bn per year.

Further observations

- The projected losses in 2024 under all scenarios would be less than in 2023 because of the reduction in reserves from QT and TLTRO roll-offs will more than offset the higher average deposit facility rate in 2024.
- Provisions of certain national central banks may be used to offset losses from the amortised adjustment, which is not accounted for in our scenario analysis.

Implications for front-end euro rates

A change in the remuneration on minimum reserves was never a pre-requisite for changes to the remuneration on government and non-euro area resident deposits at the Eurosystem. But it does tell us where the ECB's thinking is leaning and therefore makes such a change more likely, in our view. We believe the likelihood of the ECB changing the remuneration rate on government and non-euro area resident deposits to 0% shortly after the operational framework review is very high.

Risk of front-end rates distortion…

A 0% remuneration rate on government and non-euro area resident deposits may: (1) prompt governments to finance expenditure with deposits instead of bond issuance; and (2) lead to a search for yield by these depositors in short-dated assets. These flows may put:

- Widening pressures on swap spreads, in particular Schatz and Bubill spreads: this may reflect a shift by investors into other euro short-dated assets as well as a potential reduction in bond/bill supply;
- Richening pressures on repo rates: this may also reflect a shift by investors into other euro short-dated assets and potential reduction in collateral supply;
- Widening pressure on EUR FX-Sofr basis: this could be driven by investors shifting out of euro assets.

A comparable experience was in August-September 2022, when the market was concerned about the risk of a 0% remuneration rate on c. €1.2trn of government, non-euro area resident, and other euro area resident deposits while the depo rate was widely expected to become strictly positive: Schatz spreads widened c. 25bp, the Germany one-day GC-€str spread richened to c. -97bp, and the one-month EUR FX-Sofr basis widened c. 17bp (Exhibit 3, Exhibit 4, and Exhibit 5).

Exhibit 3: Schatz-€str spread
Schatz richened by c. 25bp in Aug-Sep22

Source: BofA Global Research, Bloomberg, ECB

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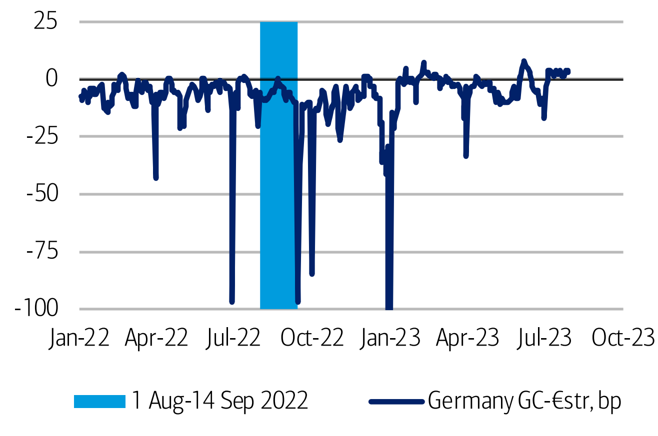
Exhibit 4: One-day Germany GC vs €str spread
GC vs €str richened to almost -100bp in Sep22



Source: BofA Global Research, Bloomberg, CME Group

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… but magnitude may be milder than before

We believe the magnitude of swap spread widening and repo richening may be less than before given the net increase in bond supply since and less deposits potentially affected, currently c. €500-600bn. Furthermore, the scope for potential drawdown on certain non-euro area resident deposits from current levels to 2014 levels may not be as large as before.

Punitive tiering cannot be ruled out…

Our scenario analysis showed the Eurosystem is still very likely face a loss in 2024. One risk is if the central bank makes further changes to the remuneration of reserves for example through punitive tiering, in particular on reserves in the deposit facility. By way of illustration only, in scenario 1:

- The Eurosystem is estimated to make a loss of €56bn in 2024;
- In 2024, the average deposit facility rate is forecast to be 3.5%;
- To fully offset this loss, if the punitive rate was set at 0%, this would imply c. €1.6trn of reserves will need to be subject to the punitive rate;
- This is equivalent to c. 10x minimum reserves.

Using the same rationale for the remaining scenarios, a punitive rate of 0% would need to be applied on between 10x and 11x minimum reserves. We view a 10-11x punitive rate multiple to be on the high side as some losses from amortisation adjustment may be offset by provisions.

We estimate excess liquidity will be c. €3.2trn at the end of 2023, falling to c. €2.3trn by the end of 2024. The way punitive tiering as framed would arguably be important, especially in a declining excess liquidity environment. We believe punitive tiering will need to be applied to excess reserves above a certain multiple for each bank, which would imply banks with more reserves will be impacted more by the punitive rate.

… but risks much larger distortions

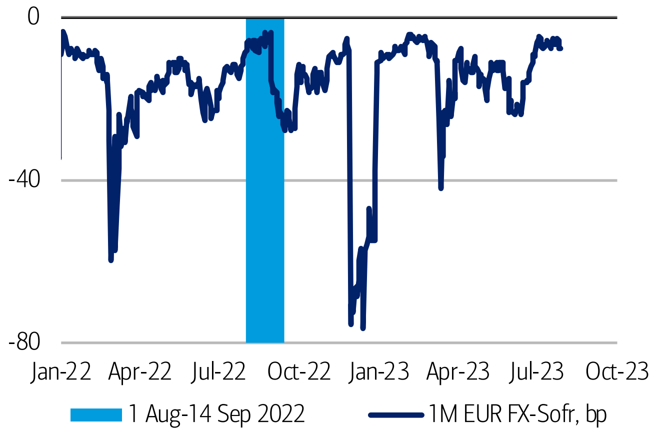
In our view, punitive tiering is likely to prompt a search for yield by banks in short-dated assets – in particular repo, bills and short-dated bonds – especially if such change was made sooner when excess liquidity is higher rather than later. The larger deposit amount potentially being affected suggests front-end rates distortion from punitive tiering could be much larger than a 0% remuneration rate on government and non-euro area resident deposits.

We recognise that banks' inherent demand for reserves has increased. The exact amount of inherent demand is unknown. Historically, the relationship between where €str trades in the policy rate corridor and excess liquidity suggested that the inherent demand may have been around €1trn (Exhibit 6). We estimate inherent demand may now be closer to €2trn as regulatory requirements, such as the liquidity coverage ratio, increased bank demand for HQLA (high quality liquid assets) in recent years (European Rates Viewpoint, 19 May 2023).

Yet we believe it is quite unlikely, at least in the foreseeable future, that banks will choose to hold reserves at a punitive rate rather than search for yield. But should excess liquidity decline to a sufficiently low level, the impact of punitive tiering on front-end rates may have counteracting distortions on front-end rates, including €str, due to different activities by different banks:

- Banks with more excess reserves will continue to search for yield, putting downward pressure on €str and richening pressure on short-dated assets;
- Banks with less excess reserves will pay up for funding, which could put upward pressure on €str, Euribor, and repo rates.

Exhibit 5: 1M EUR FX-Sofr basis
Basis widened by c. 17bp in Aug-Sep22



Source: BofA Global Research

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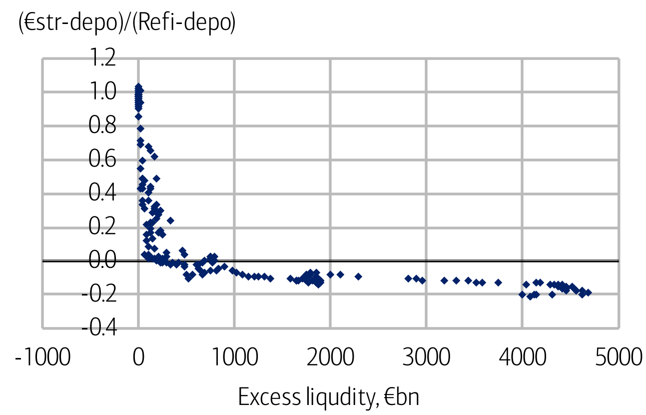
Exhibit 6: €str and excess liquidity
€str may react sooner to declines in excess liquidity than before



Source: BofA Global Research, ECB. Prior to Oct19, €str proxied by Eonia minus 8.5bp

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