European Rates Viewpoint

Front-end EUR rates 2024 outlook

21 November 2023

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Key takeaways

- We forecast the Eurosystem's balance sheet to decline the most among G6 central banks in 2024
- The operational framework review may lead to further remuneration changes and an increase in minimum reserve requirements
- We recommend ERM4 vs ERU4 €str spread steepeners to position for increasing funding costs

Liquidity demand may outstrip supply

We forecast the Eurosystem's balance sheet to decline the most among G6 central banks in 2024 (Exhibit 1). Balance sheet reduction will cause excess liquidity in the euro area to fall to €2.7trn by end-2024. But to meet the LCR requirement, banks may demand between €2.1trn and €3.4trn of excess liquidity. This means there is a risk of bank demand for excess liquidity outstripping supply in 2024.

Remuneration changes on the table

The issue of losses has become more pertinent for the ECB from a net income and mark-to-market perspective given the high level of rates in the euro area. We expect government and non-euro area resident deposits at the central bank to be remunerated at 0% across the euro area after the operational framework review. But this may not come without side effects on front-end euro rates.

Higher minimum reserves risk pressures

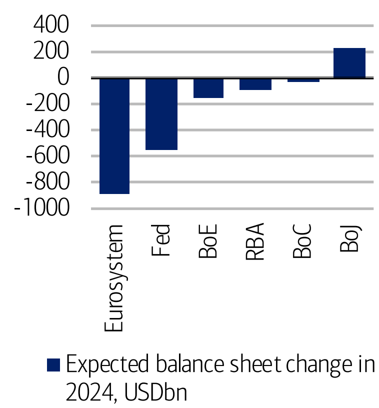
Our economists expect the ECB to raise the minimum reserve requirements from 1% to 2-3% after the conclusion of the operational framework review. Our calculations suggest an increase in minimum reserve requirements would put most pressure on banks in Italy to compete for reserves, especially if it also causes a pullback of cross border lending from banks in France.

We like Euribor-€str steepeners

We recommend ERM4 vs ERU4 €str spread steepeners to position for increasing funding costs as reserve demand may outstrip supply in 2024. We expect €str-depo spread to gradually reach 0bp, 3M Euribor-€str spreads to widen to 30bp, and repo to stay cheap vs €str with the Germany one-day GC vs €str spread to be c. +5bp.

Glossary
Buba = Bundesbank
€str = euro short-term rate
ECB = European Central Bank
EGB = European government bond
Euribor = euro interbank offered rate
GC = general collateral
HQLA = high quality liquid assets
MFI = monetary financial institution
MLF = marginal lending facility
NCB = national central bank
LCR = liquidity coverage ratio
PEPP = pandemic emergency purchase programme
QT = quantitative tightening
Sofr = secured overnight financing rate
TLTRO = targeted longer-term refinancing operations

Exhibit 1: Balance sheet changes in 2024
Largest decline expected in the euro area



Source: BofA Global Research, Bloomberg.
USD values based on spot exchange rate.
BofA GLOBAL RESEARCH

Timestamp: 21 November 2023 12:00AM EST

Liquidity demand may outstrip supply

We forecast excess liquidity in the euro area to fall to €2.7trn by end-2024. But to meet the LCR requirement, banks may demand between €2.1trn and €3.4trn of excess liquidity. This means there is a risk of bank demand for excess liquidity outstripping supply in 2024.

Our economists forecast QT to accelerate via the end of full reinvestments in the PEPP portfolio from mid-2024 and for the ECB to cut rates from June 2024. This means the ECB would continue balance sheet reduction in 2024 even as it begins to cut rates.

We expect the Eurosystem's balance sheet to fall from €6.9trn at end-2023 to €6.1trn at end-2024. On the asset side, this will be driven by the TLTRO rolloffs and QT (Exhibit 2). On the liability side, the decline will mainly be reflected in excess liquidity. Excess liquidity is defined by the ECB as the current account balance plus the deposit facility balance minus minimum reserves and any MLF borrowings. We forecast excess liquidity to fall from €3.5trn at end-2023 to €2.7trn at end-2024.

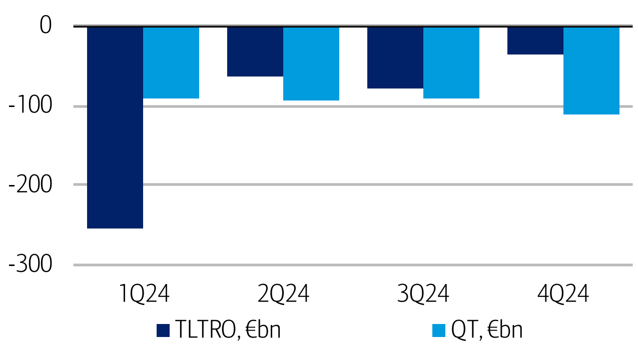
The official definition of excess liquidity masks inherent demand of banks for excess liquidity. This inherent demand reflects the need for excess liquidity for facilitate daily operational transactions and to meet regulatory requirements introduced in recent years. But there is no consensus on this quantum.

One regulation that is a source of bank demand for reserves is the LCR, defined as the unencumbered HQLA divided by the net expected outflows over a 30-day stress period. The regulatory requirement for this ratio is 100% but banks have been operating at a higher level. By way of illustration, assuming:

- Banks operate at a LCR of 130%.
- Excess liquidity accounts for between 60% and 80% of banks' HQLA
- Net expected outflows over a 30-day stress period may change by -15% to +5%

Then we estimate excess liquidity demand by banks from a LCR perspective is between €2.1trn and €3.4trn. The parameters may be adjusted, but the key message is that any reasonable assumption would imply reserve demand being higher than before regulations were implemented. It also implies there is a risk of excess liquidity demand outstripping supply in 2024 (Exhibit 3).

Exhibit 2: Drivers of Eurosystem asset decline
TLTRO and QT to drive decline in 2024



Source: BofA Global Research, ECB

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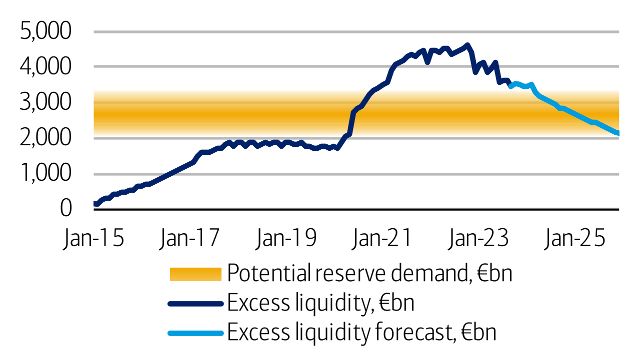
Exhibit 3: Euro area excess liquidity
Demand may outstrip supply in 2024



Source: BofA Global Research, ECB

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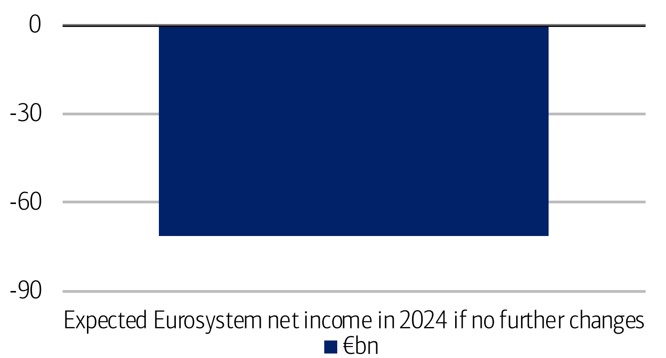
Remuneration changes on the table

The issue of losses has become more pertinent for the ECB from a net income and mark-to-market perspective given the high level of rates in the euro area. We expect government and non-euro area resident deposits at the central bank to be remunerated at 0% across the euro area after the operational framework review. But this may not come without side effects on front-end euro rates.

Eurosystem balance sheet reduction may be a result of many motives including: reducing central bank holdings of sovereign debt, exit from non-conventional monetary policy, reducing potential losses, and others. The issue of losses has become more pertinent for the ECB from a net income and mark-to-market perspective given the high level of rates in the euro area. We estimate the Eurosystem may face a negative net income of up to €70bn in 2024, driven by the high excess liquidity level (Exhibit 4 and Exhibit 5).

Exhibit 4: Net income expectations for 2024
Looking at c €70bn of losses if no further changes made



Source: BofA Global Research

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Exhibit 5: Decomposition of net income expectations for 2024
Largest cost is deposit facility remuneration

	€bn
Income from assets (A)	81
Refi	0
TLTRO	6
QE portfolio	75
Cost of liabilities (B)	120
Current account (min reserves)	0
Deposit facility	106
Other euro area resident deposits	0
Government deposits	7
Non-euro area resident deposits	6
Net income (C) = (A) - (B)	-39
Amortisation adjustment (D)	-33
Net income accounting for amortisation adjustment: (C) + (D)	-71

Source: BofA Global Research

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The Eurosystem has already announced some changes in 2023 that would reduce the potential losses: 1) the ECB reduced the remuneration on minimum reserves from the depo rate to 0% effective from 20 September 2023, and 2) the Buba reduced the remuneration domestic government deposits to 0% effective from 1 October 2023. We believe further changes to the remuneration rates on other Eurosystem liabilities will be considered but these may not be without potential side effects (Exhibit 6).

Exhibit 6: Remuneration structure of certain Eurosystem liabilities
Changes to reduce costs may come with side effects

		Current remuneration rate, %	Current amount, €bn	Possible change	Possible side effects
Current account	Minimum reserves	0%	164	Increase in minimum reserves (base case)	Tightening excess liquidity by more than intended
	Others	0%	0	-	-
Deposit facility		Depo facility rate	3,574	Lower remuneration rate / punitive tiering (risk)	Possible search for yield by cash rich banks, front-end rates meaningfully below depo
General government		0% at Buba	56	-	-
		Cap of €str-20bp for all other NCBs (based on announcements)	150	Lower remuneration rate (base case)	Government issue less debt, excess government cash reinvested in other markets
Other euro area residents		Not publicly known, assume 0%	79	-	-
Non-euro area residents		Not publicly known, assume similar to general government	228	Lower remuneration rate (base case)	Possible search for yield, richening of front-end assets

Source: BofA Global Research, Bloomberg. Data as of 14 November 2023.

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Minimum reserves

The ECB may increase the minimum reserve requirements, which would force banks to hold more reserves that are remunerated at 0%. The ECB has pushed back on the link between potential minimum reserve changes and net losses. The impact is discussed in more detail in our next section.

Deposit facility

Reserves at the deposit facility are remunerated at the deposit facility rate. Changes to that remuneration structure with the intent of reducing costs will be a form of punitive tiering that applies a lower remuneration rate to a certain amount of excess reserves that any bank may have.

The structure of punitive tiering will determine its potential impact. If a punitive rate was applied above a certain amount of excess reserves, then cash rich banks are likely to search for yield and risk front end rates going below policy rates. If a punitive rate was applied on the first certain amount of excess reserves, then this would impact cash poor banks more.

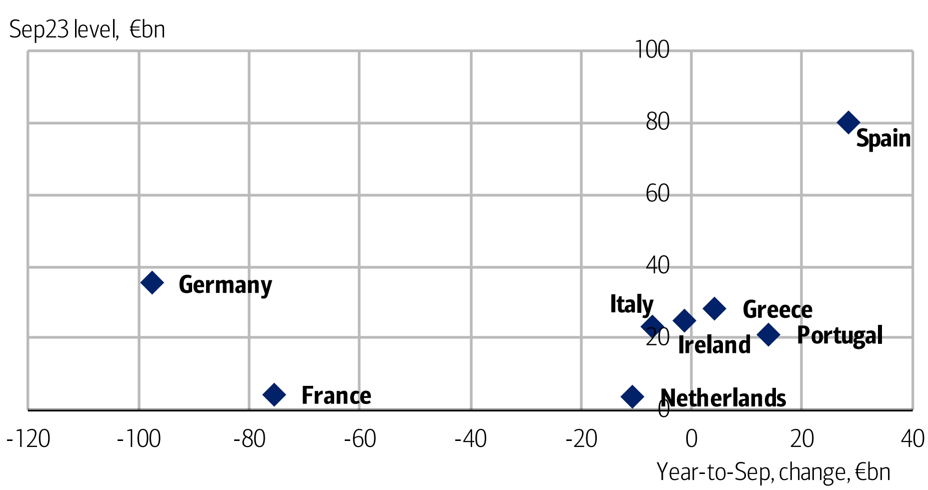
General government

Remuneration on government deposits on NCBs except the Buba is currently capped at €str minus 20bp. This means it is possible some other NCBs are remunerating their government deposits at a rate closer to 0% even without a public announcement.

We expect government deposits to be remunerated at 0% across all NCBs after the operational framework review. We would not rule out the possibility of some NCBs announcing or applying a 0% remuneration rate sooner. But we believe such announcements would be more likely to be made by NCBs whose government has already drawn down their deposits at the NCB to what is deemed by them as a sufficiently low level so that the associated market impact will be limited (Exhibit 7).

Exhibit 7: General government deposits in selected euro area countries

Germany and France posted large year-to-date declines



Source: BofA Global Research, ECB

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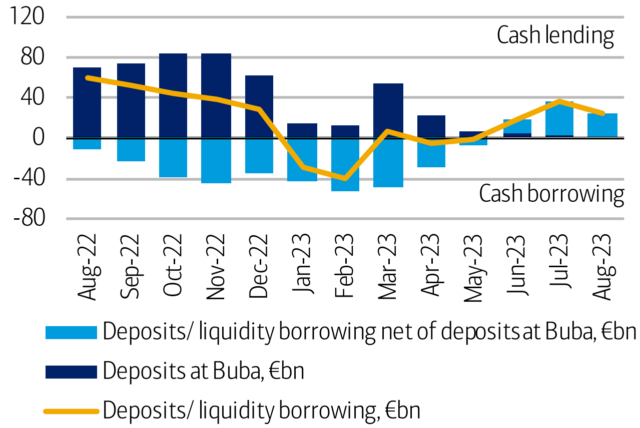
The impact on front-end rates depends on how governments respond to a lower remuneration rate. In Germany, the Finanzagentur has deposited more excess cash in the repo market in 2023 (Exhibit 8). In France, while there has not been an announcement to our knowledge of a change in remuneration of government deposits at the Banque de France, the central government has shifted deposits from the central bank to other MFIs in much of 2023 (Exhibit 9).

Exhibit 8: Deposits and liquidity of Finanzagentur
Deposits at Buba declined in 2023



Source: BofA Global Research, Finanzagentur

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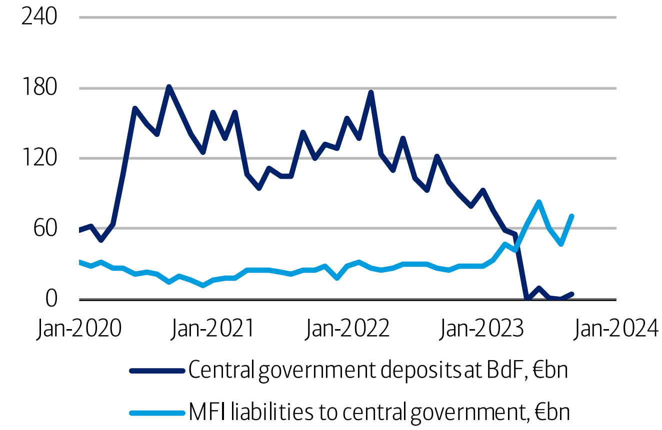
Exhibit 9: French central government deposits
Deposits may have shifted from central bank to other MFIs



Source: ECB

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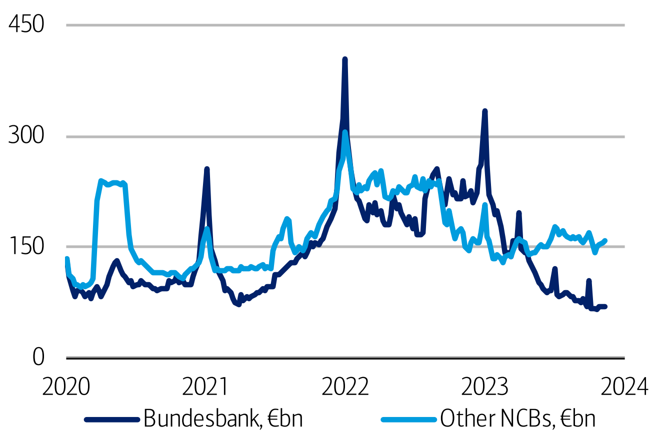
Non-euro area residents

Non-euro area residents that have direct access to the Eurosystem's balance sheet include reserve managers. The remuneration rate is not publicly disclosed and we assume it is close to the deposit rate applied on domestic government deposits. In 2023, the reduction in non-euro area resident deposits was driven by flows out of the Buba (Exhibit 10). Our base case is for all NCBs to remunerate non-euro area resident deposits at 0% after the operational framework review. This may prompt reserve managers to shift their deposits from the Eurosystem into front-end euro and non-euro assets, which could be a source of richening pressures on front-end euro assets and widening pressure on the EUR FX-Sofr basis.

One consideration for the ECB, however, is that other developed central banks offer a facility that allows reserve managers to deposit cash with them at close to their respective policy rate (Exhibit 11). If the Eurosystem were to offer 0% to reserve managers, this could at the margin impact the attractiveness of euro assets to reserve managers from a return perspective. A large reduction in such remuneration rate may need to account for potential impacts it may have on the euro's reserve currency status.

Exhibit 10: Central bank liabilities to non-euro area residents
Drawdown in 2023 came out of Buba



Source: BofA Global Research, Bloomberg

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Exhibit 11: Reserve manager cash deposit options
Rates offered by central banks generally positive

	Facility	Rate
Federal Reserve	Foreign reverse repo facility	Generally equivalent to overnight reverse repo rate
Eurosystem	Eurosystem reverse management services	Not disclosed
Bank of Japan	Banking and custody services	Prevailing market repo rate less 5bp, or 0% if requested by counterparty
Bank of England	Term deposits	Not disclosed
Bank of Canada	Cash accounts	Bank of Canada overnight deposit rate

Source: BofA Global Research, Federal Reserve, ECB, Bank of Japan, Bank of England, Bank of Canada

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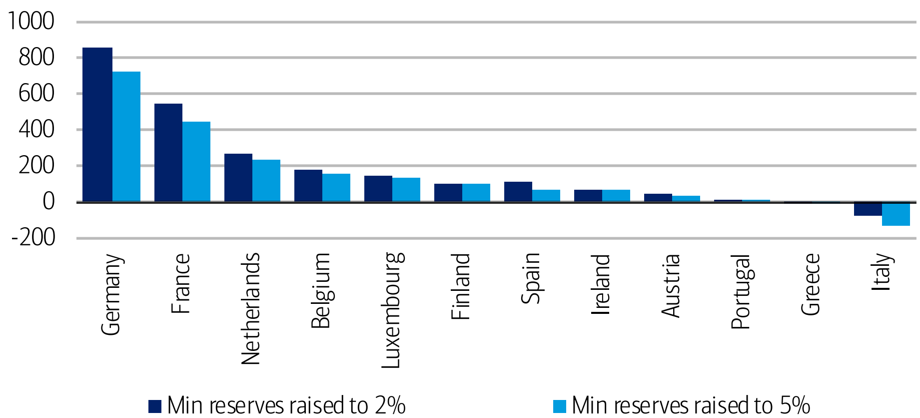
Higher minimum reserves risk pressures

Our economists expect the ECB to raise the minimum reserve requirements from 1% to 2-3% after the conclusion of the operational framework review. Our calculations suggest an increase in minimum reserve requirements would put most pressure on banks in Italy to compete for reserves, especially if it also causes a pullback of cross border lending from banks in France.

We estimate an increase in the minimum reserve requirements to even 2% could push excess liquidity of banks in Italy and Greece into negative territory by the end of 2024 based on latest reserve holdings (Exhibit 12). Banks facing the prospect of negative excess liquidity would need to compete for reserves from other euro area countries. By using end-2024 as our reference point, we accounted for the maturity of all TLTRO operations and the expected acceleration of QT via the PEPP portfolio.

Exhibit 12: Excess liquidity projections at end-2024, €bn

Banks in Italy may be under most pressure to compete for reserves



Source: BofA Global Research, ECB

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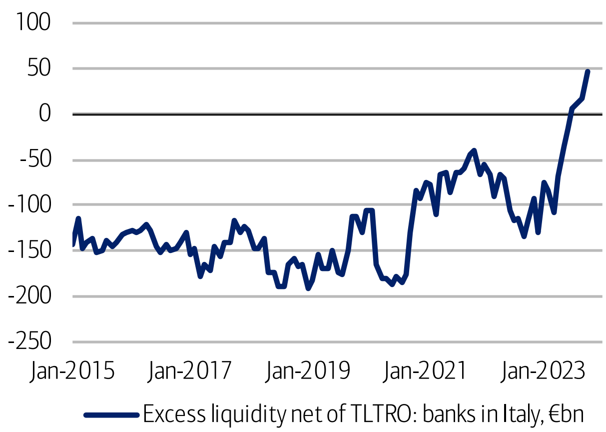
We believe risks are skewed towards excess liquidity in Italy being lower than Exhibit 12 implies. Excess liquidity net of TLTROs of banks in Italy recently became positive for the first time since at least TLTROs were introduced (Exhibit 13). This may have reflected expectations among banks in Italy that there will not be a new bridging operation from the ECB when the TLTRO III operations mature.

The recent increase in excess liquidity in Italy was likely due to increased cross border lending by banks in France (Exhibit 14). This potentially leaves excess liquidity of banks in Italy vulnerable to a withdrawal of cross border lending by banks in France as excess liquidity declines generally.

Conducting a similar LCR analysis as that in the Excess Liquidity section of this report for banks in France specifically, we estimate banks in France may demand between €0.6bn and €1.0trn of reserves as HQLA. This would be more than our estimated excess liquidity of c. €0.6bn in France if the ECB raises minimum reserve requirements to 2% accounting for QT and TLTRO rolloff, with all other things being equal.

The risks of reserves being excessively scarce may be a consideration for the ECB in its operational framework review, especially with respect to determining the medium term size of the Eurosystem's balance sheet and the medium term level of excess liquidity.

Exhibit 13: Excess liquidity net of TLTROs for banks in Italy
First positive readings since TLTROs introduced



Source: BofA Global Research, ECB

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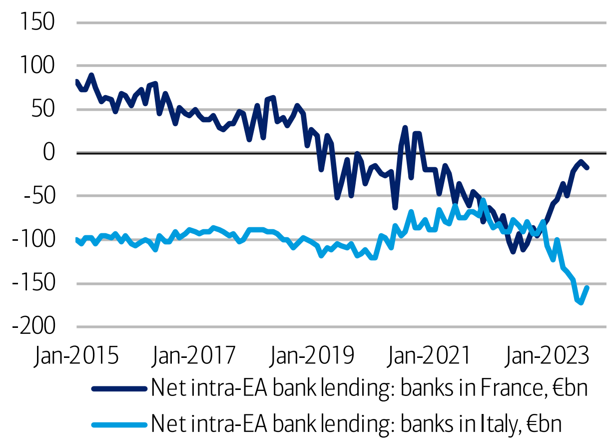
Exhibit 14: Net cross border lending by banks in France and Italy
Banks in France have been lending to banks in Italy



Source: BofA Global Research, ECB

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We like Euribor-€str steepeners

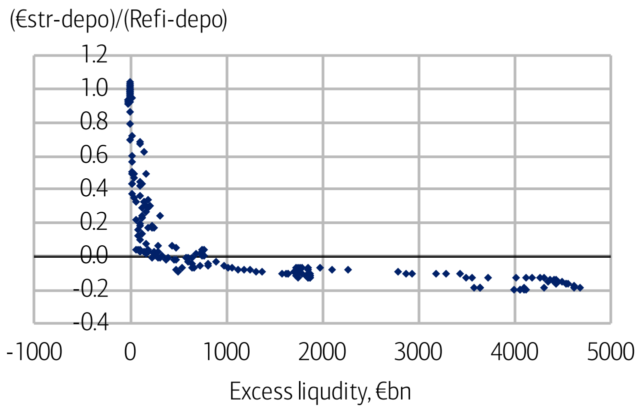
We recommend ERM4 vs ERU4 €str spread steepeners to position for increasing funding costs as reserve demand may outstrip supply in 2024 (current: +0.9bp, target: +5.5bp, stop: -1.6bp). Risk is a very large short-term shock that causes the Euribor futures-€str spread curve to invert.

€str: We expect the €str-depo spread to gradually reach 0bp by end-2024. Reserve reduction by the central bank will reduce bank balance sheet size and exposure value used for regulatory requirements. This reduces the need for banks to charge their €str counterparties for balance sheet usage when placing overnight deposits. We see risks skewed to the upside, i.e. €str exceeding depo, if the imbalance between reserve demand and supply is greater than expected, causing €str away from the floor and towards the ceiling of the ECB's policy rate corridor. Demand for excess liquidity has increased to an unknown quantum so €str may rise above the floor of the policy rate corridor sooner than when historical relationships would suggest (Exhibit 15).

Euribor: We forecast 3M Euribor fixing at 3.25% by end-2024, which incorporates a widening of the 3M Euribor-€str spread to 30bp and the expected ECB rate cut cycle from mid-2024. We expect bank demand for term funding to remain strong and for term premium to build across the curve (Exhibit 16). A risk to our view is bank funding demand is skewed significantly towards longer term funding.

Repo: We expect repo to stay cheap vs €str with the Germany one-day GC vs €str spread to be c. +5bp. This reflects our outlook of high EGB supply, bond positioning remains long, and increased funding demand by banks (Exhibit 17). We estimate excess liquidity in the euro area as a share of EGB outstanding to fall close to pre-Covid levels by end-2024 (Exhibit 18). We also expect Italy GC to widen vs Germany GC because the excess liquidity decline in the euro area is likely to prompt cash poor banks to raise cash first, including from the repo market. The risk to our view is significant search for yield flows from remuneration changes to the Eurosystem's liabilities that causes front-end euro assets to richen.

Exhibit 15: €str, policy rate corridor, and excess liquidity
Increased reserve demand means €str may rise above floor sooner



Source: BofA Global Research, Bloomberg

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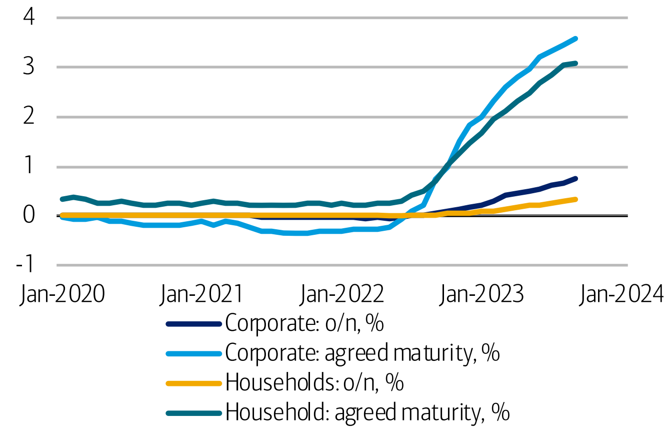
Exhibit 16: Rates on new deposits
Banks have been paying up for term funding



Source: ECB

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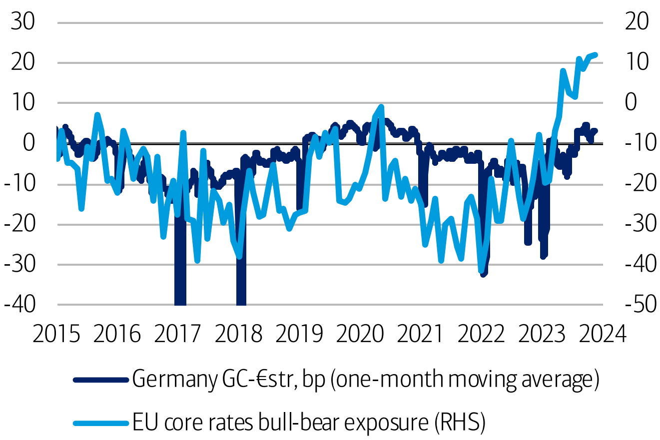
Exhibit 17: Germany one-day GC vs €str and rates exposure
Long bond positioning has supported cheaper repo



Source: BofA Global Research FX & Rates Sentiment Survey, Bloomberg, CME Group

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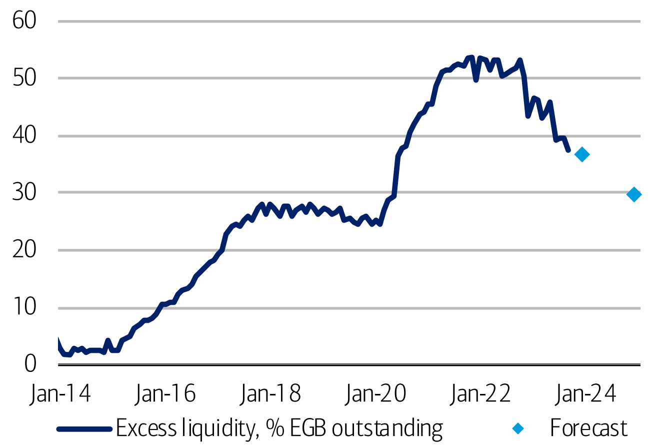
Exhibit 18: Excess liquidity vs government bonds: Euro area
Excess liquidity to fall to 30% of EGB outstanding by end-24



Source: BofA Global Research

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