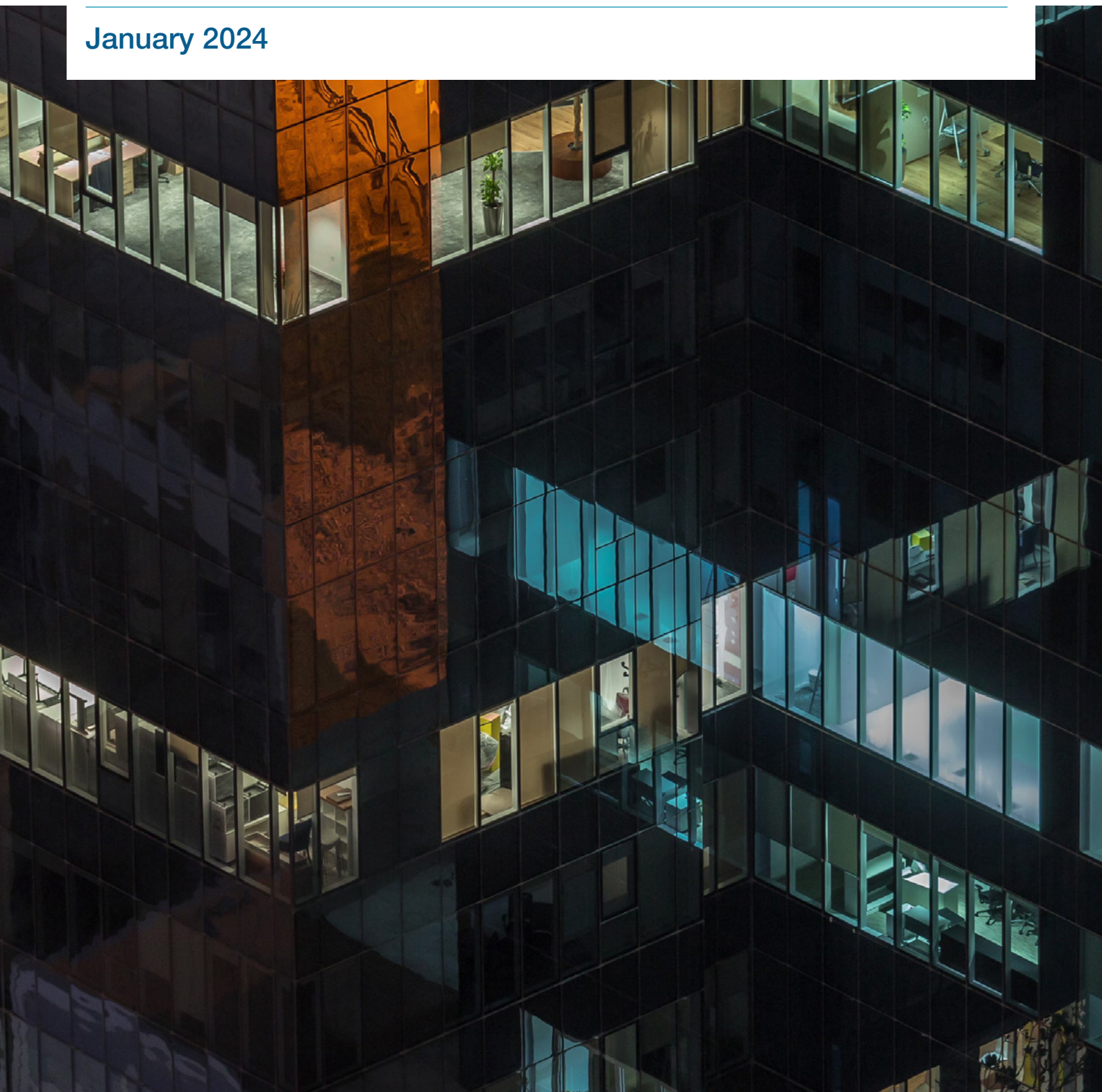


The European repo market at 2023 year-end

An ICMA European Repo & Collateral Council (ERCC) briefing note

January 2024



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Author: Andy Hill, January 2024

andy.hill@icmagroup.org

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Executive summary

- Compared to previous year-ends, the 2023 turn for the euro repo market proved to be relatively unexceptional. While the market began pricing in around 250bp premium for German GC and 150bp premium for French GC back in October, this continued to erode as we got closer to the end of the year, ultimately trading around 60bp and 40bp rich respectively.
- Non-core euro GC was even less spectacular, tightening by around 15bp.
- Similarly, the dispersion in rates for specials was relatively contained and largely in line with the moves in GC.
- This relative calmness is attributed to a number of factors, namely: a reduction in the level of excess reserves; an increase in the supply of government bonds; general deleveraging and a lack of positioning by hedge funds; the collapse in the EUR-USD FX basis; and reduced pressure on bank intermediation arising from various regulatory reporting requirements.
- The GBP, USD, and JPY markets were also relatively uneventful over year-end, despite an initial small spike in US GC rates.

Introduction

Year-end repo market pricing and liquidity are generally a focus of market attention, with the euro market proving itself particularly vulnerable to significant dislocations in recent years. ICMA's European Repo and Collateral Committee (ERCC) has published a review of repo market performance and conditions over the "turn" of the year since the wholly unexpected and somewhat unprecedented extreme price moves observed in the euro repo market at [2016 year-end](#).

Following an expensive, but relatively calm, 2022 year-end and a year of central bank 'normalization' of monetary policy, the 2023 turn was never expected to be as problematic as previous year-ends, even with it being four calendar days in duration. In many ways, the interest was largely to see how 'normal' the end of 2023 would be.

Euro repo

The lead up

Focus on 2022 year-end had begun as early as the summer months, with firms starting to lock in funding over the turn well in advance and paying a significant premium to do so. This was mainly driven by fears of a shortage of HQLA (reflected in sovereign bond swap spreads) as much as the usual concerns about regulatory requirements putting pressure on bank balance sheets. In contrast, the market did not start talking about 2023 year-end until October, with limited flows over the turn implying rates of around ESTR¹-250 for German general collateral (GC) and ESTR-150 for French GC.

But as we moved closer to the event horizon, the market began to fade these initial levels, with implied rates continuing to cheapen. Unlike 2022, a number of factors began to suggest that year-end pressures would be relatively minimal. Firstly, with continued repayments of the TLTRO III over the course of the year, the amount of excess reserves sloshing around the system had declined (see Figure 1). Meanwhile, record net issuance of Eurozone government bonds in 2023 (some +€470bn) helped take the pressure off the other side of the equation, as observed in cheapening swap spreads (See Figures 2 and 3).

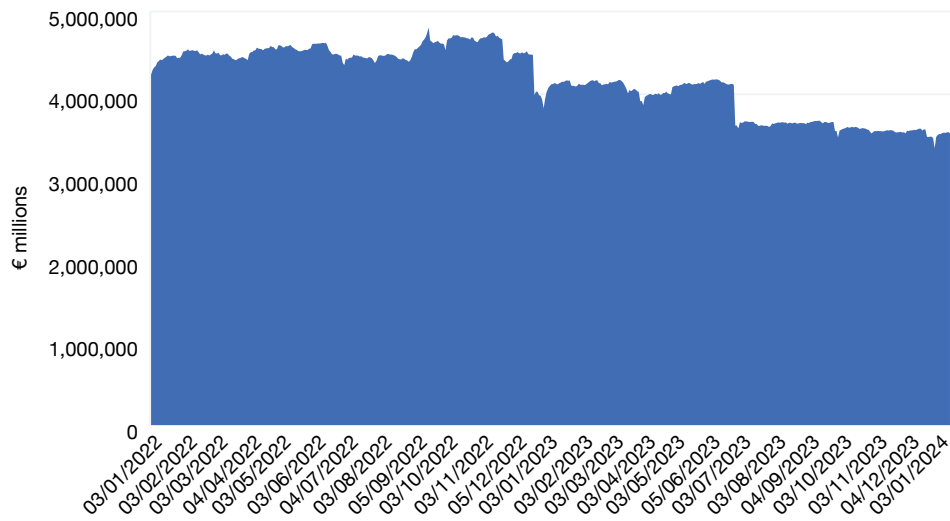
Unlike 2022, hedge fund activity was more focused on opportunities in the US and Japanese markets, prompting a notable deleveraging and a reduction in short positioning in euro government bonds going into the final quarter. To some extent this can be seen in the general decline in balances of public sector bonds on loan under the Public Sector Purchase Programme (PSPP) and Pandemic Emergency Purchase Programme (PEPP) from mid-2023 (see Figure 4) as well as the volume of European SSA bonds on loan more generally, which also drifted lower in the second half of the year (see Figure 5).

The EUR-USD FX Basis, which can provide opportunities for holders of USD to make additional returns by swapping into EUR, headed to parity in the final weeks of the year (see Figure 6), closing that particular arbitrage window, taking downward pressure off EUR rates.

Finally, it would seem that the usual year-end regulatory pressures on bank balance sheets, including Basel reporting requirements, G-SIB scores, and various national bank levies, were not as constraining as in previous years, possibly helped by increased access to client clearing, which helps to minimize the balance sheet footprint of repo intermediation. In previous years, as banks are forced to close their doors to certain clients due to limited capacity, the impact can be seen in very short-term T-bill rates as funds switch into these as an alternative to the repo market. While we do observe T-bill yields trending lower in the final quarter, and with a year-end premia of between 15 and 50bp (see Figure 6), this is relatively muted compared to previous years.

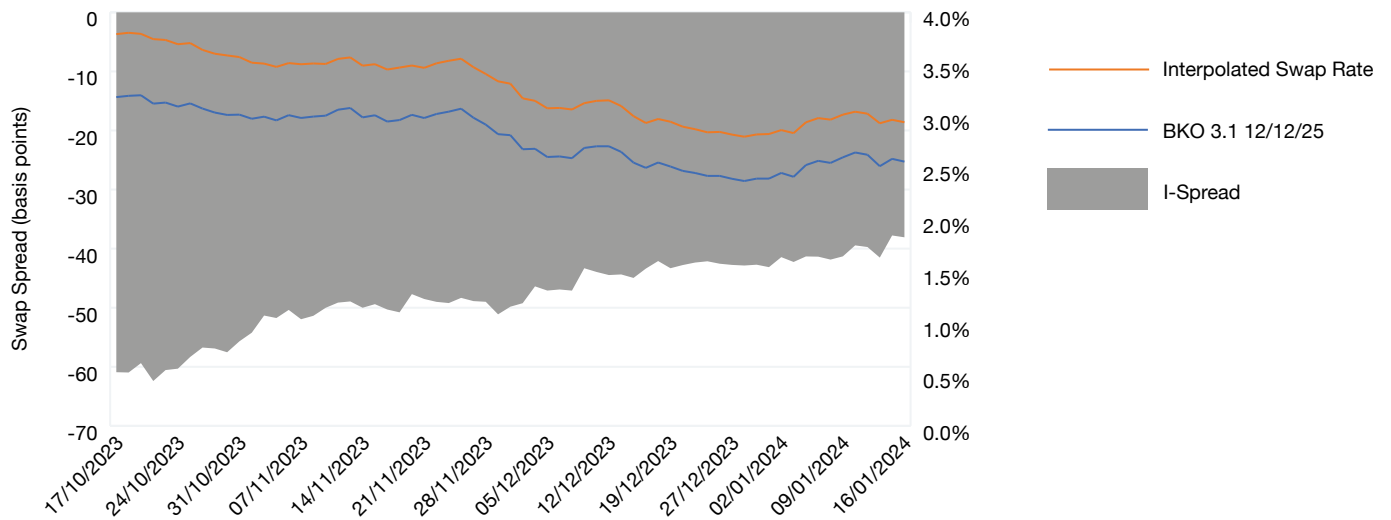
¹ The Euro Short-Term Rate (ESTR) is an interest rate benchmark that reflects the overnight borrowing costs of banks within the eurozone. The rate is calculated and published by the ECB.

Figure 1: Eurozone excess reserves²



Source: ICMA analysis using Bloomberg data

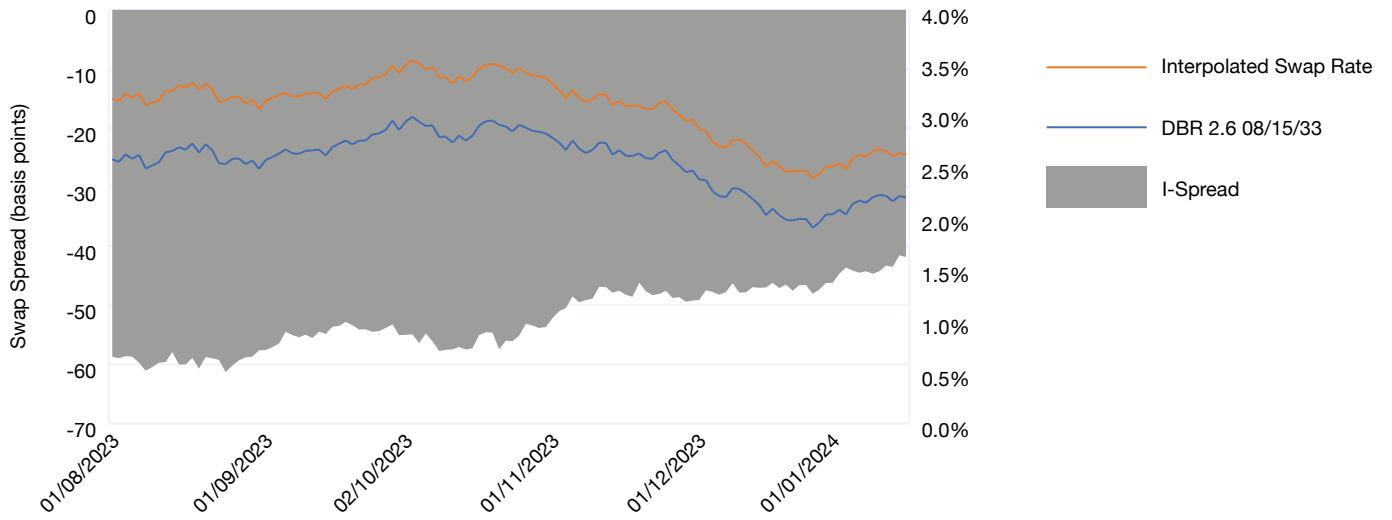
Figure 2: German 2yr Schatz Swap Spread



Source: ICMA analysis using Bloomberg data

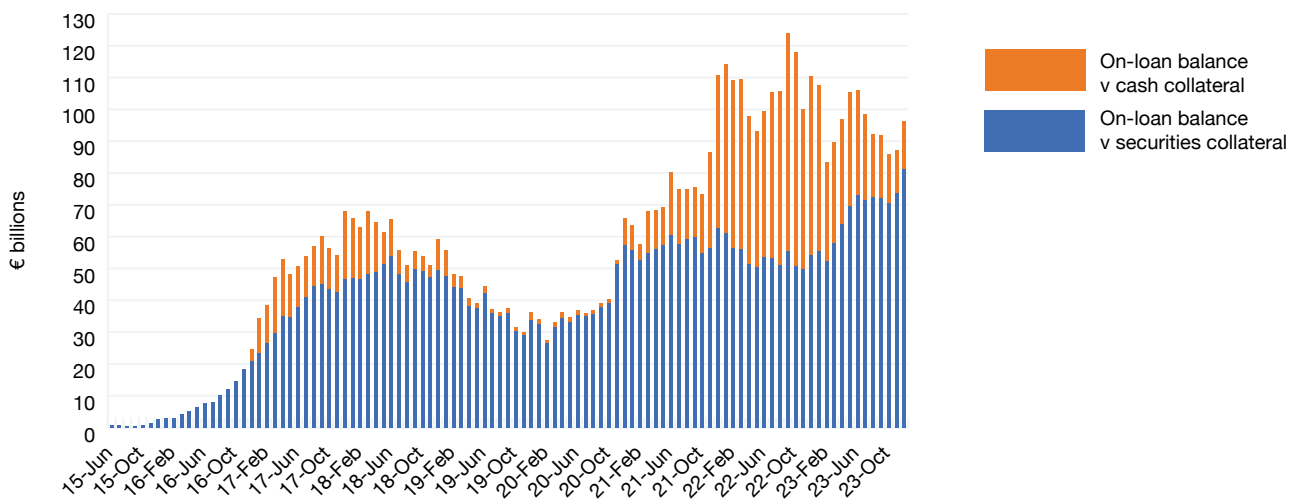
² The excess liquidity defined as deposits at the deposit facility net of the recourse to the marginal lending facility.

Figure 3: German Bund Swap Spread



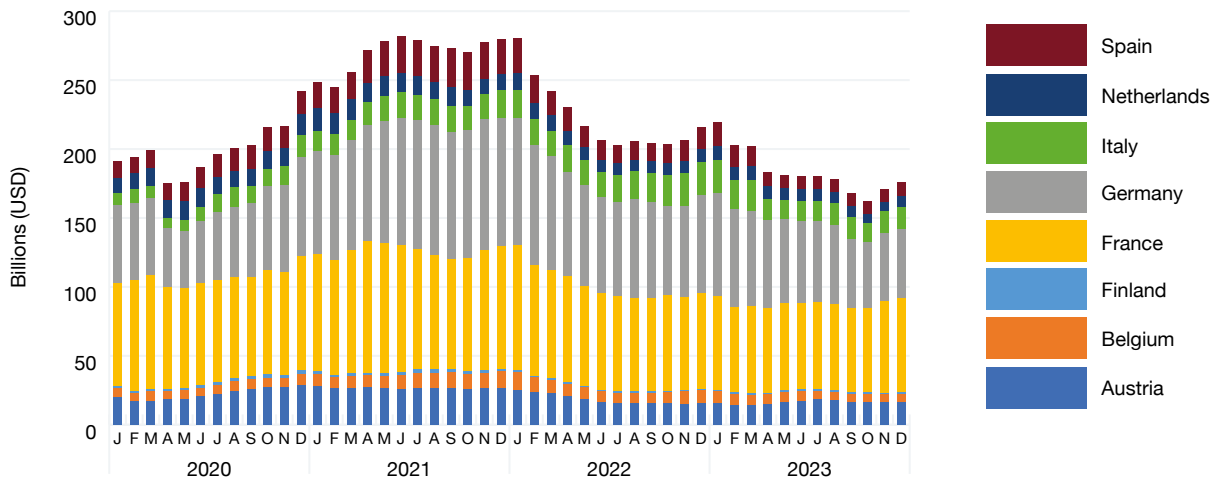
Source: ICMA analysis using Bloomberg data

Figure 4: Eurosystem PSPP and public sector securities lending



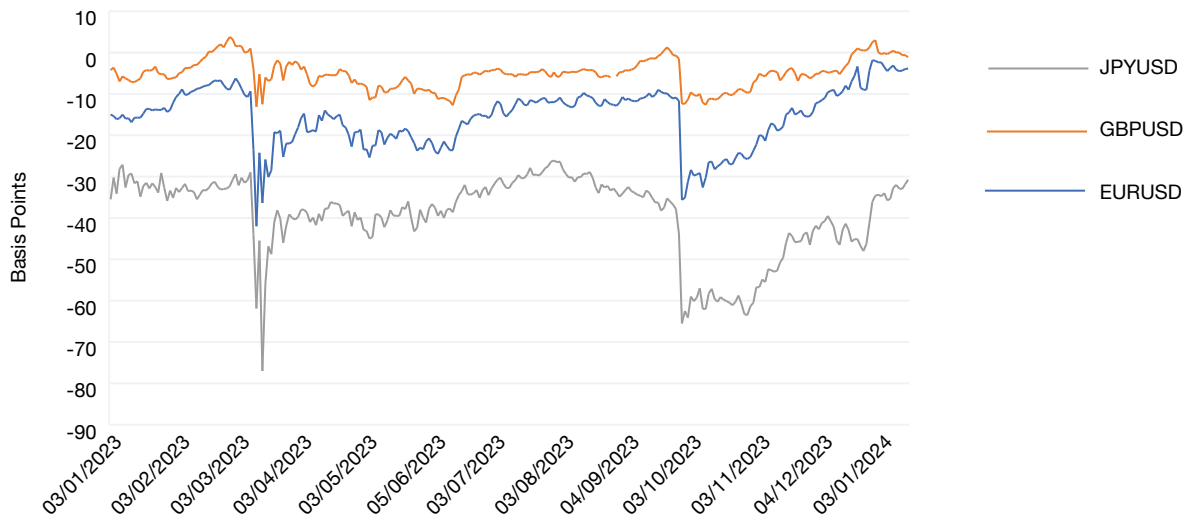
Source: ICMA analysis using ECB data

Figure 5: EU SSA bonds on loan



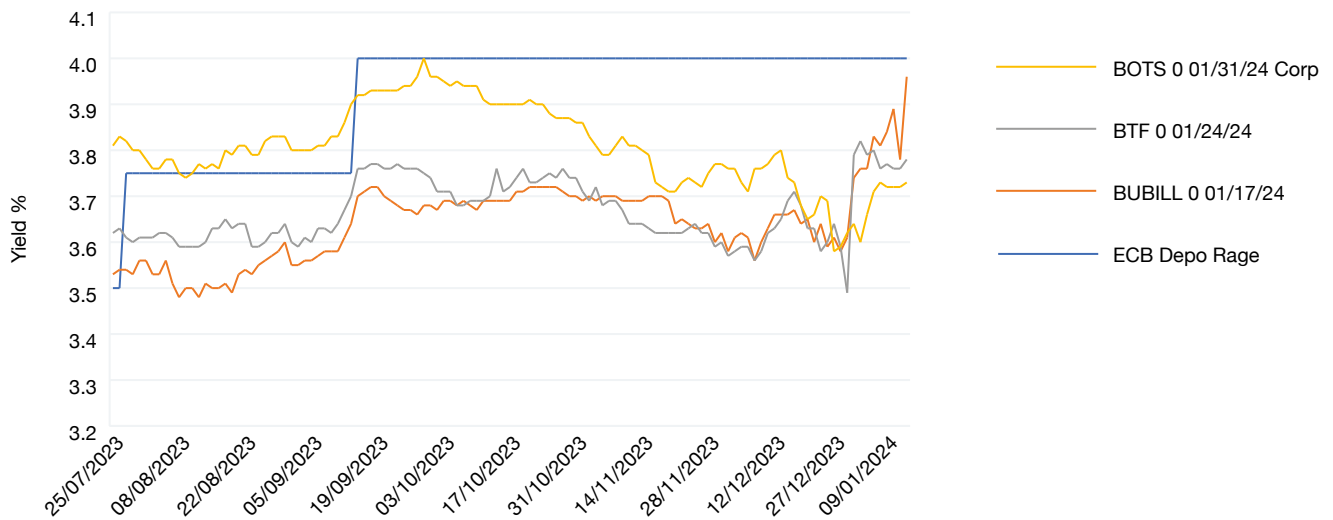
Source: Datalend

Figure 6: FX Basis



Source: ICMA analysis using Bloomberg data

Figure 7: Euro T-bills



Source: ICMA analysis using Bloomberg data

The event

If there was a surprise in the 2023 year-end, it was how ‘cheap’ levels were, relative to previous year, with German GC traded in the interbank market averaging 3.49% (ESTR-39bp) and French GC at 3.55% (ESTR-33bp), which is a richening of around 45bp and 40bp respectively. Interestingly, the premium of Germany over France, which had been priced at 50bp leading up to year-end, collapsed to just 6bp.

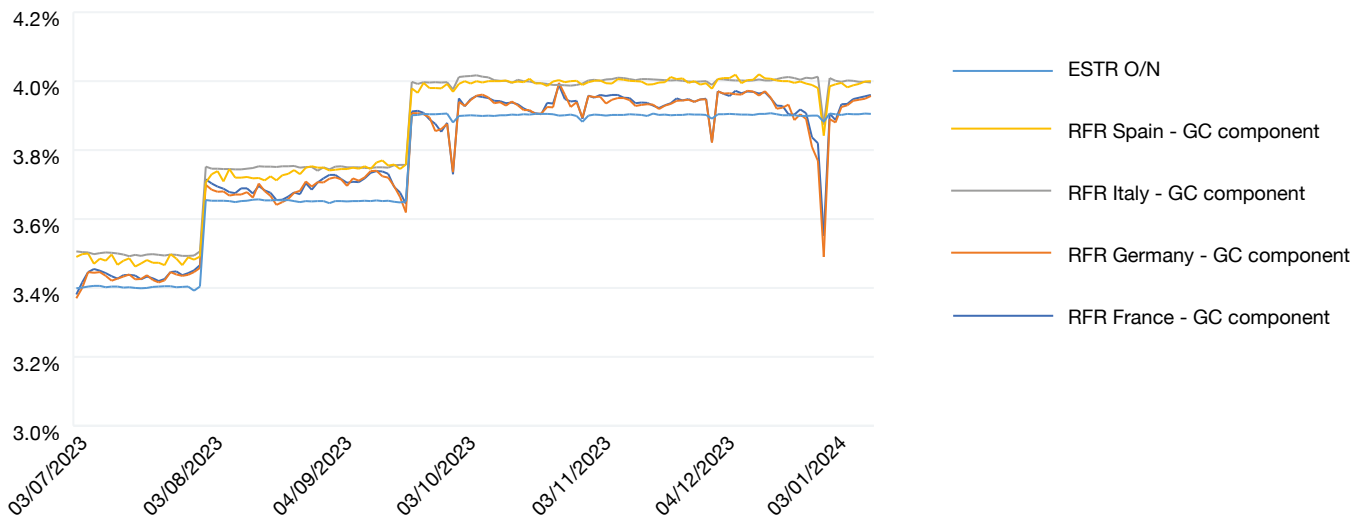
Non-core GC was even less dramatic, with Italy averaging 3.87% (ESTR-1bp) and Spain 3.84% (ESTR+4bp), which is a relative tightening of around 15bp for both.

These moves are illustrated in Figures 8 and 9.

In terms of ‘specials’ or Specific Collateral – SC), again interbank rates were relatively unexciting. German SC saw a range of 3.85% to 3.20% (ESTR -3bp to ESTR-68bp), with French SC ranging from 3.85% to 3.31% (ESTR-3bp to ESTR-57bp). In non-core, Italian SC ranged from 3.97% to 3.60% (ESTR+9bp to ESTR-29bp) and Spain SC ranged from 3.90% to 3.58% (ESTR+2bp to ESTR+30bp).

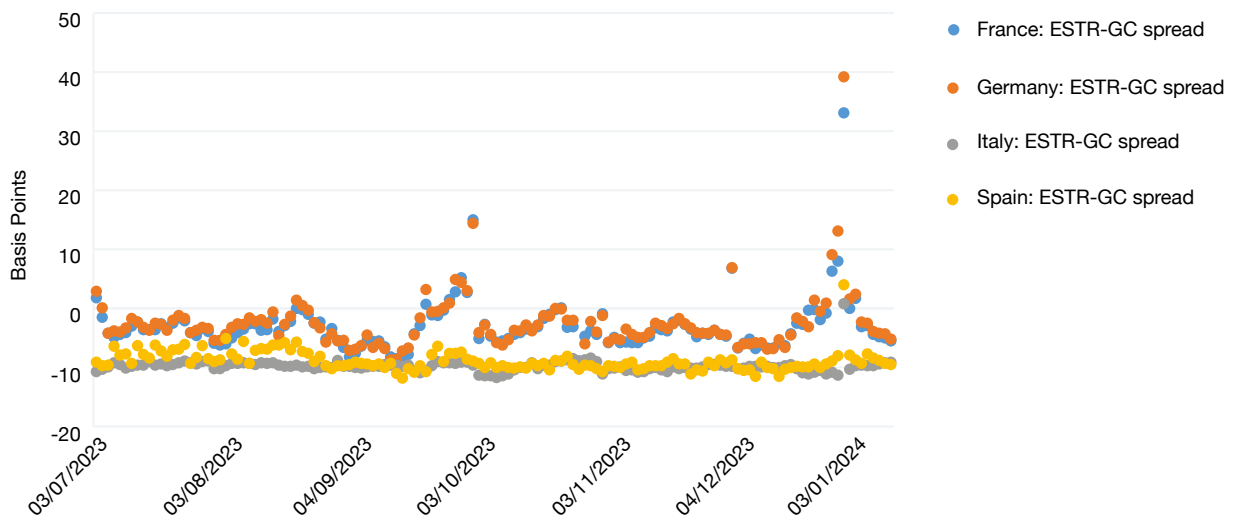
The low prints for SC (ie the most expensive levels) are illustrated in Figures 10 and 11. Meanwhile, Figure 12 shows the range of specials traded on Eurex over the turn. The rates are largely consistent with the RFR observations, which is what we would expect, with the notable exception of Italy, where the benefit of netting is likely to be main driver of lower prints.

Figure 8: EUR Repo Funds Rate³ GC Rates



Source: ICMA analysis using CME data

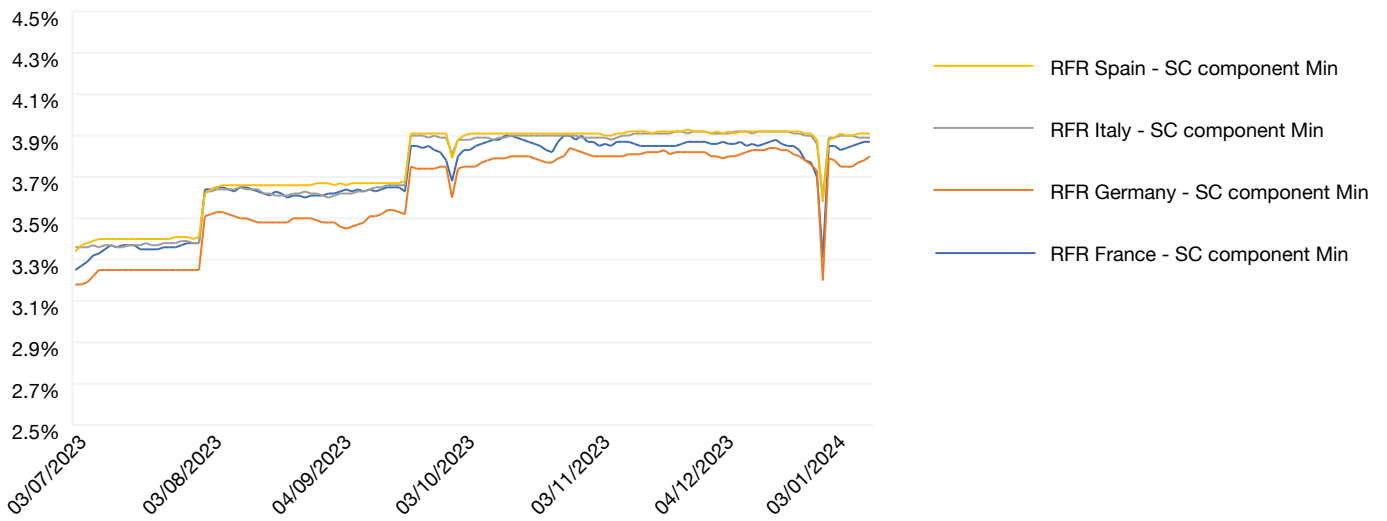
Figure 9: EUR Repo Funds Rate ESTR-GC Spreads



Source: ICMA analysis using CME and Bloomberg data

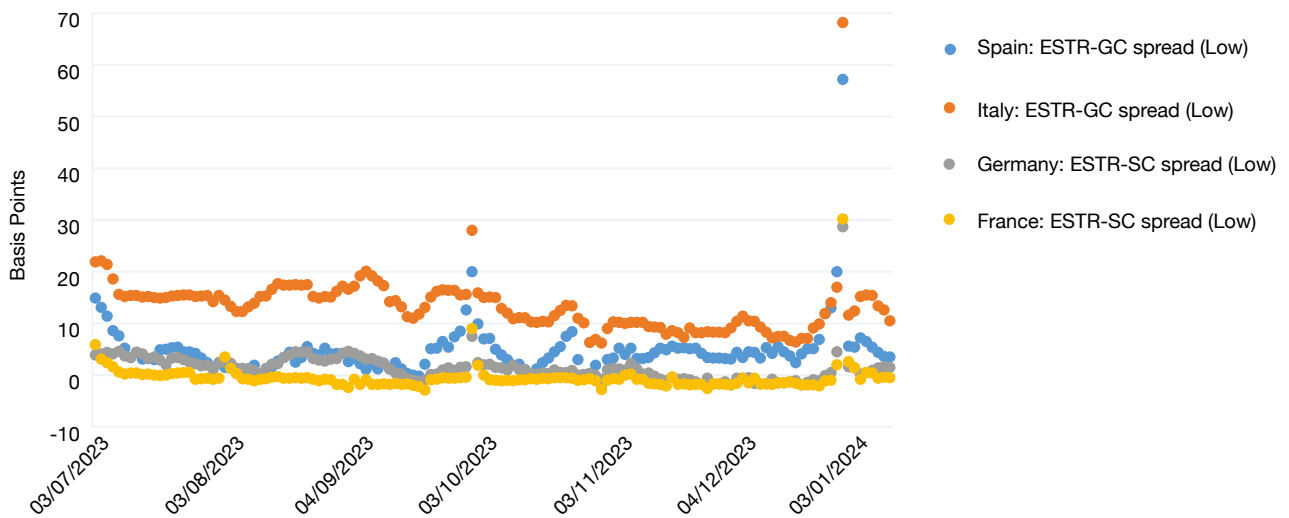
³ The Euro Repo Funds Rate is a one-day, risk-free rate based on centrally cleared repo trades on either BrokerTec or MTS. RFR Euro is calculated on trades using sovereign bonds issued by many Eurozone countries.

Figure 10: EUR Repo Funds Rate SC Rates (lows)



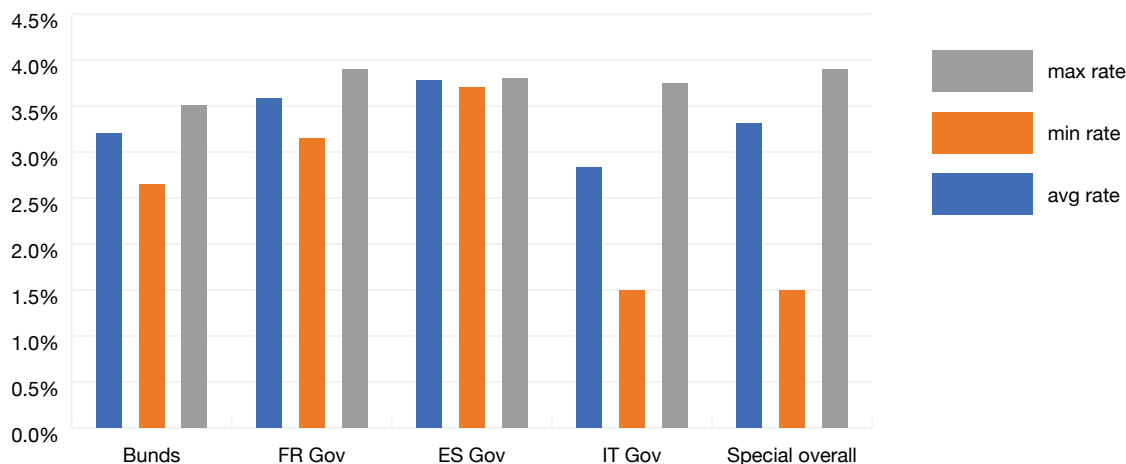
Source: ICMA analysis using CME data

Figure 11: EUR Repo Funds Rate ESTR-SC Spreads (lows)



Source: ICMA analysis using CME and Bloomberg data

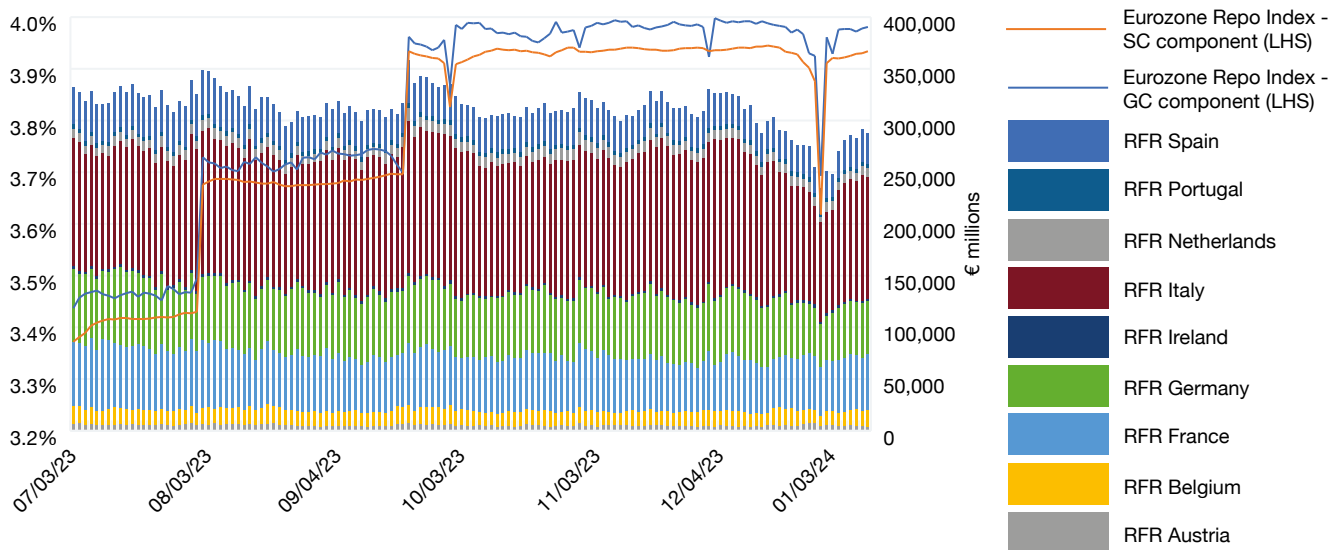
Figure 12: Eurex Specials rates over the turn



Source: Eurex

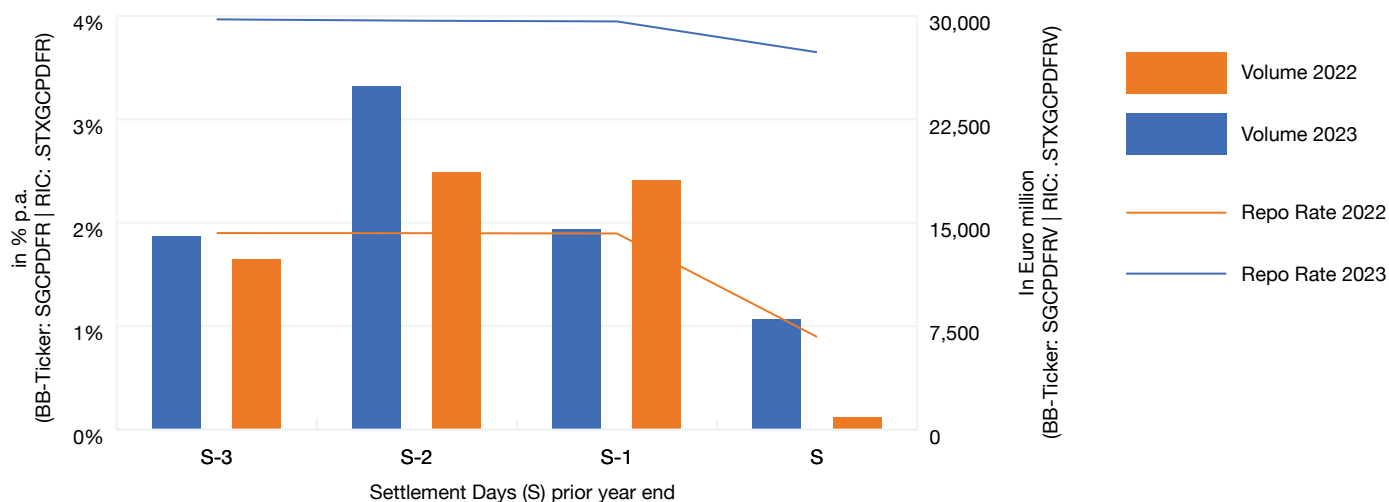
In terms of activity, we observe the usual decrease in volume over the turn, which is partly the result of dealers reducing balance sheet, but also due to participants having locked in funding in advance of the date. However, RFR (interbank) volumes for the turn only decreased by around 24% compared to the average daily volumes for Q4 of 2023, and an 11% increase on 2022 year-end volumes (see Figure 13). This year-on-year increase in traded volumes can also be seen in data for Eurex Stoxx GC Pooling (see Figure 14). Participants also report that the market was deep enough to get business done, which is evident in the relatively small rate dispersion observed. They further note that there was little or no uptick in settlement fails, which also correlate closely with poor liquidity or increased stress.

Figure 13: EUR RFR Traded volumes and volume-weighted rates



Source: ICMA analysis using CME data

Figure 14: Eurex Stoxx GC Pooling year-end volumes 2023 vs 2022



Source: Eurex

Conclusion

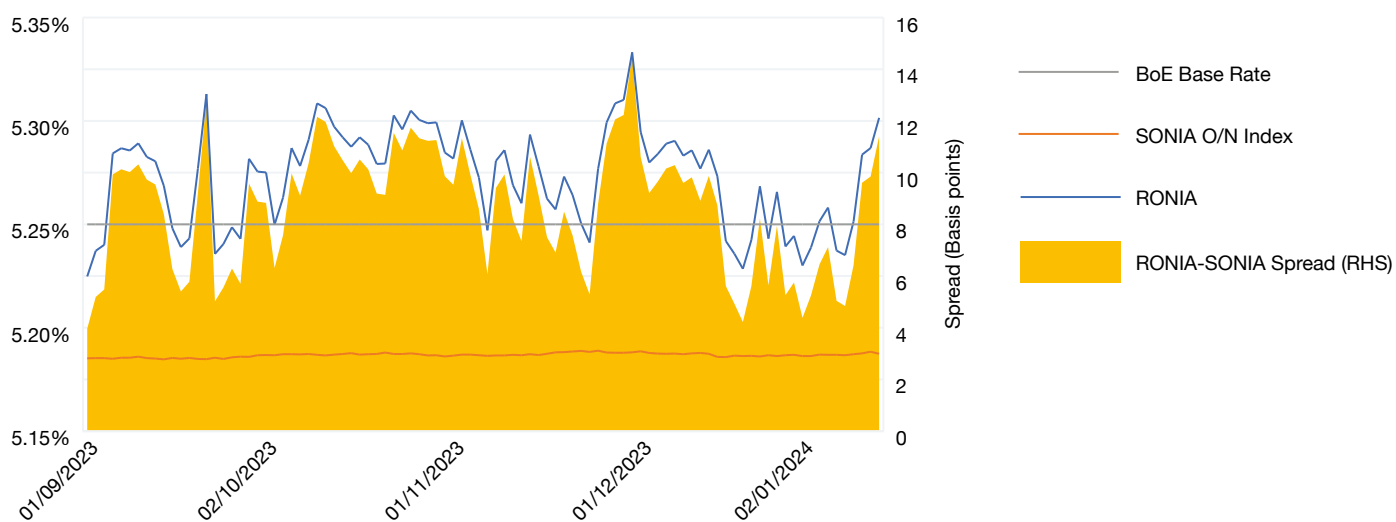
If 2023 year-end held any surprises for the Europe repo market, it was how remarkably uneventful and relatively inexpensive and involatile it was. In previous years we have seen multiple factors, such as excess liquidity, limited access to central bank lending programmes, leveraged positioning, FX basis dislocations, and reductions in bank intermediation capacity, all conspire to create significant swings in pricing and a scramble for market participants to get their repo business done. While some of these concerns remain relevant, the 2023 year-end could be indicative of post-QE market normalization, with the risk of future year-ends being a spike to the upside, rather than the huge drops in rates that became the norm in recent years.

GBP repo

Going into year-end, gilt GC had been quite volatile, with DBV⁴ trading in a range of 5.28% to 5.21%. Similarly, specials were also trading in a 5 to 20bp range in terms of premium. In the lead up, the market had not been pricing any illiquidity premia into year-end, and it was correct, with prints over the turn not breaking out of the recent range. If anything, the only point of note was a significant cheapening of specials, as lenders continued to provide supply into the market.

The Gilt repo market saw more volatility immediately following year-end, as liquidity dropped and funding rates spiked, with the spread to OIS widening to around +11bp (see Figure 15), and specials returning to around GC-10 to -20bp.

Figure 15: Sterling repo and money market rates



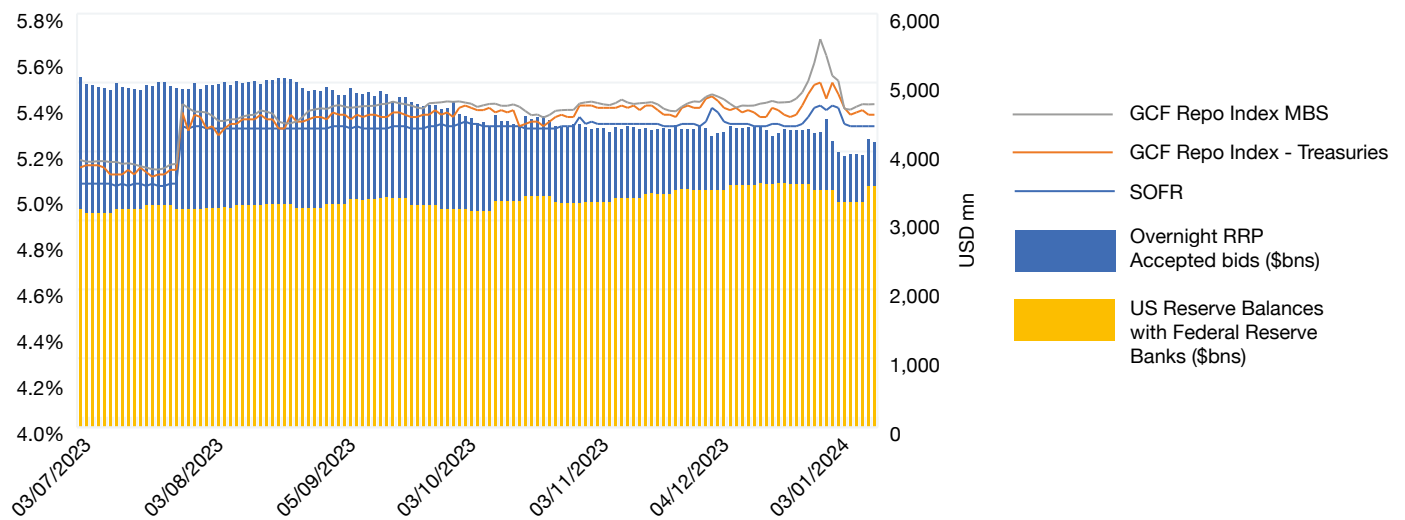
Source: ICMA analysis using Bloomberg data

⁴ DVB, or 'Delivery By Value', is a mechanism whereby a CREST member who has borrowed money against overnight gilt collateral may have gilts on its account to the required value delivered automatically by the system to the CREST account of the money lender.

USD repo

In contrast to the 2022 turn, 2023 year-end for the US market was relatively volatile, with UST GC reaching a high of 5.70% (SOFR+32bp) before dropping back to average 5.57%, while MBS GC saw a more significant widening. Similarly, the uptick in the use of the Fed's overnight Reverse Repo (RRP) operations was relatively muted (\$1.0tn, compared to an average uptake of \$798bn for December), with reliance on the facility decreasing significantly since its record print on the last day of 2022.

Figure 16: US Repo Rates, Excess Reserves, and RRP balances

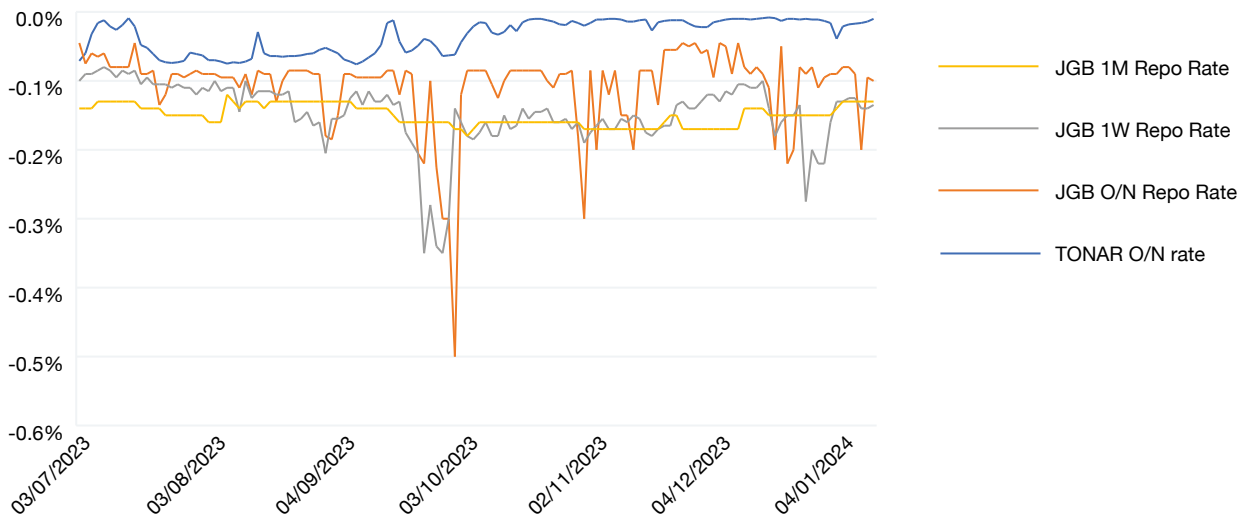


Source: ICMA analysis using Bloomberg data

JPY repo

JGB repo rates for the turn of the year opened around -0.20%, a richening of around 5 to 10bp, which can also be seen reflected in the one-week rate (see Figure 17). However, as we rolled into tom-next, the market was better offered, seeing GC print as high as -0.085%. Similarly, specials were also well offered, with no additional year-end premium, and with bonds in the 5-10yr sector trading around -0.35% to -0.40% in line with previous session.

Figure 17: JPY Repo Rates



Source: ICMA analysis using Bloomberg data

ICMA Zurich**T: +41 44 363 4222**Dreikönigstrasse 8
8002 Zurich**ICMA London****T: +44 20 7213 0310**110 Cannon Street
London EC4N 6EU**ICMA Paris****T: +33 1 83 75 66 13**25 rue du Quatre Septembre
75002 Paris**ICMA Brussels****T: +32 2 801 13 88**Avenue des Arts 56
1000 Brussels**ICMA Hong Kong****T: +852 2531 6592**Unit 3603, Tower 2, Lippo Centre
89 Queensway, Admiralty, Hong Kong