

International Capital Market Association European Repo Market Survey

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Executive Summary

In December 2024, the European Repo and Collateral Council (ERCC) of the International Capital Market Association (ICMA) conducted the 48th in its series of semi-annual surveys of the repo market in Europe.

The survey asked a sample of financial institutions in Europe, among other things, for the value and breakdown of their repo contracts that had been transacted before close of business on December 11, 2024, and that would still be outstanding after that date. Replies were received from 61 entities, mainly banks.

Data were also reported separately by the principal automatic inter-dealer repo trading systems (ATS), automated dealer-to-customer repo trading platforms and tri-party repo agents in Europe, giving the size and composition of almost all electronic repo trading and tri-party repo collateral management in the region.

Total repo business

The total value, at close of business on December 11, 2024, of repos and reverse repos still outstanding on the books of the 61 entities who participated in the latest survey fell back to **EUR 10,860.3 billion** from an all-time high of EUR 11,114.3 billion in June. This represented a decrease of -2.3% since the previous survey and -0.4% year-on-year. The latest total represents the first contraction since June 2020, but was presaged by a deceleration in the rate of growth over the previous 18 months.

In the latest survey, the net reverse repo position of the survey sample fell to 4.2%, suggesting that it is on a downward trend. The shift away from collateral borrowing and securities-driven repo implied by the contracting net reverse repo position is what would have been expected in the second-half of 2024, given the pivot by central banks from quantitative easing (QE) to quantitative tightening (QT), and the consequent release of securities holdings and collateral back into the market as well as the increasingly heavy issuance of government securities. However, other factors also appear to have been at work, including another redeployment of dealer balance sheet capacity from Europe to the US and caution ahead of the end-year, combined with reluctance to tap ECB liquidity facilities for fear of attracting stigma.

Trading analysis

The share of repo traded between dealers on <u>automatic</u> trading systems (ATS) outstanding on the books of the survey sample continued to retreat from its recent peak in June 2023. The counterparts to that decline were continued growth in the shares of voice-brokered and directly-transacted business, both tri-party and bilaterally-managed. However, the recovery of tri-party repo, following the switch from QE to QT by central banks, may have lost some momentum.

Part of the contraction in the share of ATS repo may be the result of the increase in US dollar repo trading, as European ATS do not trade dollar repo. The contraction was also concentrated in repos against French and German government securities. Trading in these traditional safe assets was hit by reduced demand due to political uncertainty and abundant supplies. In addition, GC financing came off its peak, in part, as the boost it received from the flow of official deposits back to the repo market, following the cut in central bank rates of remuneration, came to an end. On the other hand, there was growth in the share of repos against Italian securities, as Italian banks were forced back into the market by the end of QE. The mixed fortunes of eurozone government securities and intensified competition meant that some ATS were winners and some were losers.

The growth in the outstanding value of repo traded between dealers and customers across <u>automated</u> trading systems slowed down in the second-half of 2024, but there is no reason to believe that the electronification of the dealer-to-customer market is petering out.

Geographical analysis

The increase in US dollar repo boosted the share of cross-border business into and out of the eurozone at the expense of domestic, intra-eurozone and anonymous trading, all of which are dominated by euro and sterling repo.

Clearing analysis

The reduction in the share of ATS continued to depress the share of CCP-clearing.

Cash currency analysis

The US dollar maintained its upward trajectory, as expectations of interest rate cuts by the Federal Reserve increased trading interest (including continued heavy basis trading and inflows into money market funds which were then reinvested in repos), as well as high interest rates and bond yields, the distribution of the record new issuance of US Treasuries and the parking of cash in the repo market that flowed out of the US equity market whenever there was a sell-off.

Collateral analysis

The share of US Treasuries in the collateral holdings of the survey sample moved slightly higher to a new all-time record and remained the largest collateral holding of the survey sample, followed by Italian government securities and UK gilts. The growth of US Treasuries was reflected in a drop in the share of EU government securities, in particular, German government securities. The shares of Japanese and Spanish securities also waned. However, the trend growth in the share of Italian securities accelerated.

In tri-party repo, government securities remained the most common type of collateral. Covered bonds, which flooded into the tri-party market when the ECB's TLTRO III facility ended, remained the second largest holding. Public sector securities continued to trend down and corporate bonds started to follow, but the share of supranational issues trended up. The composition of the credit ratings on tri-party collateral shifted further away from AAA towards AA. There were also increases in the shares of BBB ratings and high yield issues. Average haircuts deepened for government securities, but much more so for ABS and financial corporates, and even more so for equity and convertibles. On the other hand, securitised assets other than ABS (including covered bonds, MBS and collateralised assets) benefited from lower haircuts.

Contract analysis

Repos that have been guaranteed or indemnified (including the various forms of "sponsored" repo) accounted for 4.5% of the outstanding positions of the survey sample. The share of the dollar increased to almost one-half of the outstanding amount.

Repo rate analysis

The share of floating-rate repo – which started to expand in 2020 in response to central bank interest rate hikes – fell back in December 2024, as central banks began to cut rates.

Maturity analysis

The share of short-dated repo declined slightly from the high reached in June, as positions shifted into the onemonth to six-month range and also into forwards. As a consequence, the range of the weighted-average residual term-to-maturities of repo outstanding on the books of the survey sample lengthened to 28-64 days, which is an expected seasonal change in the second-half of the year.

Product analysis

The share of securities lending executed on repo desks continued to recover and reached 13.6% of the combined positions on repo desks.

Concentration analysis

The share of the survey sample taken by the top ten respondents in the survey fell back in December to 66.8%. That loss in share was captured by the next two decades of respondents.

Chapter 1: The Survey

On December 11, 2024, the European Repo and Collateral Council (ERCC) of the International Capital Market Association (ICMA) conducted the 48th in its series of semi-annual surveys of the repo market in Europe. The first of these surveys took place in June 2001 and the series now charts an unrivalled history of the development of the core segment of the European repo market over more than two decades, during which time, the market burgeoned and matured into an efficient and essential component of the regional financial system, while coping with episodes of severe economic and financial turbulence.

The survey was carried out and the results analysed on behalf of ICMA by the author, Richard Comotto, under the guidance of the ERCC Council.

1.1 What the survey asked

The survey asked financial institutions operating in Europe, who are members of ICMA, for the starting value of the cash side of repos and reverse repos that were still outstanding at close of business on Wednesday, December 11, 2024. The survey therefore measures the stock, or outstanding balance, of transactions that have not matured or been terminated by the survey date. Except for two questions (see below), it does not measure the flow of transactions, or turnover, over the period between two successive survey dates.

The survey covers all types of true repo, which means agreements in which collateral is sold and repurchased, in other words, where collateralisation is by the transfer of legal title to the collateral rather than by the creation and attachment of a security interest, such as a pledge. Repo can take the form of repurchase transactions, reverse repurchase transactions, buy/sell-backs and sell/buy-backs. The survey does not cover synthetic structures.

The survey asked respondents to divide their data into repo (cash borrowing) and reverse repo (cash lending), as well as to break these transactions down by:

- location of their counterparty
- market segment
- cash currency
- type of contract
- type of repo rate
- remaining term-to-maturity
- method of collateral management
- origin of collateral and
- some other categories.

In addition, entities were asked to report the outstanding value and composition of any securities lending and borrowing conducted from their repo desks.

Since 2017, the survey has asked for the number of new transactions and the value of turnover since the previous survey (these are the only questions in the survey which measure turnover) and, since 2019, the numbers and types of legal agreements under which entities can transact repos.

Since June 2023, questions have been included in the survey about guaranteed and indemnified repo.

An extract of the accompanying Guidance Notes for survey respondents is reproduced in Appendix A.

As well as reports sent by respondents, data have also been contributed directly, since 2003, by the principal <u>automatic</u> dealer-to-dealer repo trading systems (ATS) and by the main tri-party repo agents in Europe.^{1 2} The latter have also reported tri-party securities lending since 2016. Data are now also provided separately by the two principal <u>automated</u> dealer-to-customer repo trading systems in Europe.³ These direct sources of data cover almost the entire populations of electronic trading and tri-party repos executed by the survey sample can be placed in context. Members of the Wholesale Market Brokers' Association (WMBA) contributed data on voice-broking directly between 2002 and 2017.

1.2 The response to the survey

The latest survey was completed by 61 entities belonging to 53 financial groups. Two respondents (headquartered in Australia and Austria) dropped out of the survey, but a new respondent (headquartered in Sweden) joined and a previous respondents (headquartered in Greece) rejoined. There was therefore no net change in the size of the survey sample between June and December 2024.

Of the 61 respondents in the latest survey, 45 were headquartered across 15 European countries, including members of the EU (37), Norway (1), Switzerland (1) and the UK (6). The EU respondents were headquartered across 12 of the 27 member states (there continued to be no respondents in the survey from Finland, and none from the former Accession States). 32 EU respondents were headquartered across 10 of the 19 countries of the eurozone. Other survey respondents were headquartered in Japan (5) and North America (12). 20 respondents were branches or subsidiaries of foreign parents, most of which (16) continued to be located in the UK.

Many respondents provided data for their entire European repo business. Others made separate returns for one or more (but not necessarily all) of their European offices. Respondents were asked to report for both their UK and EU offices, where they have divided their European business post-Brexit. A list of the respondents that have participated in the ICMA's repo surveys is contained in Appendix B.

1.3 The next survey

The next survey is scheduled to take place at the close of business on Wednesday, June 11, 2025.

Any financial institution wishing to join the next survey will be able to download copies of the questionnaire and accompanying Guidance Notes from ICMA's website at <u>www.icmagroup.org/surveys/repo/participate</u> shortly before the survey date.

Entities who participate in the survey will receive a confidential list of their rankings across the main survey categories.

The data received in the survey are used for no other purpose than to inform the survey report. Individual returns are seen only by the author. Only aggregated data are published and ICMA is not permitted to disclose data reported by individual respondents.

Questions about the survey should be sent by e-mail to reposurvey@icmagroup.org.

¹ The reporting ATS were BrokerTec (CME), eRepo (formerly TP Repo), Eurex, MTS Repo (Euronext) and SIX (which is not an ATS but has been included for convenience). Only Dealerweb did not report.

² The reporting tri-party agents were Bank of New York Mellon, Clearstream Banking Luxembourg, Euroclear Bank, JP Morgan and SIS, who together account for the bulk of tri-party business in European repo. Agents not reporting included Citibank. Euroclear UKI (Crest) provided an estimate of the total tri-party repo positions managed by their DBV (Delivery-By-Value) service.

³ Tradeweb has provided data since 2020 and GLMX, who joined the survey in December 2023, from 2022.

Chapter 2: Analysis of Survey Results

The aggregate results of the latest two surveys (June and December 2024) and of the surveys in each December in the three previous years (2022-2024) are set out in Appendix C. The full results of all previous surveys can be found at <u>www.icmagroup.org</u>.

Total repo business (Q1)

The total value, at close of business on December 11, 2024, of repos and reverse repos outstanding on the books of the 61 entities who participated in the latest survey fell back to **EUR 10,860.3 billion** from its all-time high of EUR 11,114.3 billion in June. This represented a decrease in the aggregate size of the repo books of the survey sample of -2.3% since the previous survey and -0.4% year-on-year (from EUR 10,899.8 billion in December 2023), compared with growth of +3.0% and +7.1%, respectively, in the June 2024 survey. The latest total represents the first contraction since June 2020, but had been presaged by a deceleration in the rate of growth over the previous 18 months.



Figure 2.1 – Outstanding value of total business by the survey sample

The survey sample as a whole has been a net lender of cash to (and therefore a net borrower of collateral from) the rest of the repo market continuously since 2012, when central banks started to offer longer-term liquidity to sustain the European financial markets in the aftermath of the eurozone sovereign debt crisis (see Table 2.1).

From 2016 until the December 2022 survey, the net cash lending position of the survey sample trended up, reflecting abundant central bank liquidity, including that provided after the "dash for cash" at the start of the Covid-19 pandemic lock-down (see Figure 2.2). By December 2022, net cash lending had reached the equivalent of 5.9% of the total outstanding value of the survey (EUR 617.3 billion).

Table 2.1 – Total repo business

| survey | total | repo | reverse repo |
|----------------------------|--------|-------|--------------|
| 2024 December | 10,860 | 47.9% | 52.1% |
| 2024 June | 11,114 | 47.5% | 52.5% |
| 2023 December | 10,900 | 47.3% | 52.7% |
| 2023 June | 10,794 | 48.5% | 51.5% |
| 2022 December | 10,374 | 47.0% | 53.0% |
| 2022 June | 9,680 | 47.4% | 52.6% |
| 2021 December | 9,198 | 47.8% | 52.2% |
| 2021 June | 8,726 | 48.2% | 51.8% |
| 2020 December | 8,285 | 48.0% | 52.0% |
| 2020 June | 7,885 | 48.6% | 51.4% |
| 2019 December | 8,310 | 48.5% | 51.5% |
| 2019 June | 7,761 | 48.1% | 51.9% |
| 2018 December | 7,846 | 48.5% | 51.5% |
| 2018 June | 7,351 | 48.7% | 51.3% |
| 2017 December | 7,250 | 47.8% | 52.2% |
| 2017 June | 6,455 | 48.5% | 51.5% |
| 2016 December | 5,656 | 48.1% | 51.9% |
| 2016 June | 5,379 | 48.0% | 52.0% |
| 2015 December | 5,608 | 47.5% | 52.5% |
| 2015 June | 5,612 | 48.0% | 52.0% |
| 2014 December | 5,500 | 48.8% | 51.2% |
| 2014 June | 5,782 | 48.6% | 51.4% |
| 2013 December | 5,499 | 49.2% | 50.8% |
| 2013 June | 6,076 | 49.8% | 50.2% |
| 2012 December | 5,611 | 49.1% | 51.9% |
| 2012 June | 5,647 | 48.7% | 51.3% |
| 2011 December | 6,204 | 50.3% | 49.7% |
| 2011 June | 6,124 | 50.7% | 49.3% |
| 2010 December | 5,908 | 51.0% | 49.0% |
| 2010 June | 6,979 | 53.5% | 46.5% |
| 2009 December | 5,582 | 50.0% | 50.0% |
| 2009 June | 4,868 | 52.2% | 47.8% |
| 2008 December | 4,633 | 49.9% | 50.1% |
| 2008 June | 6,504 | 48.8% | 51.2% |
| 2007 December | 6,382 | 49.4% | 50.6% |
| 2007 June | 6,775 | 50.8% | 49.2% |
| 2006 December | 6,430 | 50.7% | 49.3% |
| 2006 June | 6,019 | 51.7% | 48.3% |
| 2005 December | 5,883 | 54.6% | 45.4% |
| 2005 June | 5,319 | 52.4% | 47.6% |
| 2004 December | 5,000 | 50.1% | 49.9% |
| 2004 June | 4,561 | 50.6% | 49.4% |
| 2003 December | 3,788 | 51.3% | 48.7% |
| 2003 June | 4,050 | 50.0% | 50.0% |
| 2002 December | 3,377 | 51.0% | 49.0% |
| 2002 June | 3,305 | 50.0% | 50.0% |
| 2002 bune 2001 December | 2,298 | 50.4% | 49.6% |
| 2001 June | 1,863 | 49.6% | 50.4% |

In June 2023, there was a sharp contraction in the net reverse repo position of the survey sample to 3.0% of the total outstanding value of the survey (EUR 325.9 billion). This reversal was driven by the redeployment of the balance sheets of major dealers from Europe to the US and Asia, in pursuit of more remunerative trading opportunities.

However, the contraction was temporary. In the December 2023 survey, net cash lending by the survey sample recovered to 5.5% of the survey, as the drop in the share of reverse repo and the recovery in repo in June were retraced. On the other hand, in terms of absolute size, the net reverse repo position of the survey sample was not fully restored in December 2023, only reaching EUR 598.1 billion compared with EUR 617.3 billion in December 2022 (prior to the contraction). And in the June 2024 survey, the sample's net reverse repo position began to shrink again, albeit more gradually than in June 2023, falling to EUR 546.7 billion (4.9% of the survey total). In the latest survey, the net reverse repo position of the survey sample fell to 4.2%, suggesting that it has assumed a downward trend. The shift away from collateral borrowing and securities-driven repo that is implied by the contracting net reverse repo position is what would have been expected in the second-half of 2024, given the pivot by central banks to quantitative tightening (QT) and the consequent flow of collateral securities back into the market.

However, other factors may also have been at work. It was reported that there was a substantial deleveraging in the European financial markets after the December bond futures delivery date, which occurred just before the survey date, as dealers again redeployed balance sheet capacity from Europe to support trading in the buoyant US equity market. In contrast, there were said to be insufficient opportunities in the European markets, including a reduction in bond-futures basis trading by hedge funds. And dealers may still have been throttling back the size of their balance sheets ahead of the end-year. In the case of the euro market, caution about expanding balance sheets at the end-year may have been increased by reluctance to resort to ECB liquidity facilities for fear that stigma would be attached to such use. In the UK gilt repo market, while fear of stigma attaching to the use of central bank facilities appears to have been much less, activity was said to have been dampened by the reduced demand for liquidity by LDI (liability-driven) pension funds. These investors are major end-users of gilt repo, but they built up cash reserves following the crisis in September 2022 and were also able to deleverage as higher interest rates reduced the size of their liabilities.

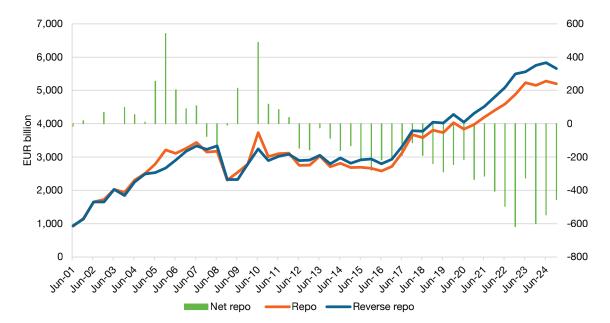


Figure 2.2 - Total repo versus reverse repo positions of the survey sample

ICMA survey methodology

The survey measures the value of outstanding transactions at close of business on the survey date. While the measurement of the flow of new repo between two dates is useful for some business and market analyses, the stock of transactions outstanding on one date was adopted because it gauges risk exposure and open interest in the market.

Note that outstanding value understates the share of shorter-term repos, given that such transactions run off faster between surveys than longer-term repos. Because repos traded on automatic trading systems (ATS) and cleared on a central counterparty (CCP) are typically very short-term, the consequence is that the share of outstanding balances that have been electronically-traded and centrally-cleared is smaller than their share of turnover. This can be seen by comparing published aggregate SFTR data on new and outstanding repos.

It also needs to be remembered that changes in outstanding balances can reflect cumulative changes in turnover or variations in the tenors of new transactions or both.

Another important feature of the survey methodology is that it recognises repos from their transaction dates (when they are executed by the two parties and contracts are formed), rather than from their value or purchase dates (when cash and collateral are first due to be exchanged). This transaction-date basis means that the outstanding value measured by the survey includes forward repos, as well as unsettled new non-forward transactions. The latter include one-day repos that are transacted on or before the survey date, but that are not due to be settled until the business day after the survey date (tom/next repo) or on the following business day (spot/next repo). This gives greater weight to one-day repo than would measurement on a value-date basis.

The values measured by the survey are not adjusted for the reporting of the same transaction by two respondents. However, a study by the author (see the report of the December 2012 survey) suggested that inflation due to this problem of double-counting may not be very significant. Interestingly, a trade repository in Europe has estimated that two-sided reporting has been less than 30% under the EU Securities Financing Transactions Regulation (SFTR) and less than 15% under UK SFTR, which is consistent with the author's estimate of double-counting.

The survey does not measure the value of repos transacted with central banks as part of their monetary policy operations, but it should include their investment operations in the repo market with survey respondents.

Growth in market size

In order to accurately gauge the growth of the European repo market (or at least that segment represented by the survey sample), it is not valid to simply compare survey totals. Some changes may represent the entry or exit of respondents into and out of the survey, mergers between respondents or the reorganisation of repo books across respondent banking groups. To offset the impact of changes in the structure and composition of the survey sample, comparisons are also made of the aggregate outstanding positions reported by a sub-sample of those entities who have participated continuously over several surveys.

In the December 2024 survey, the books of the sub-set of 59 survey respondents who had responded to the latest three surveys contracted by similar amounts to the full survey sample: -1.9% since June 2024, compared to -2.3% for the full survey sample, and by -0.2% year-on-year, compared with -0.4%.

Between June and December 2024, 32 of the 61 entities who responded to the latest survey expanded their repo books (down from 35 out of 61 in June). The repo books of another 27 respondents contracted over the same period (up from 25 respondents between the previous two surveys). While there was a shift towards the contraction of repo books across the survey sample, the median positionweighted change in all repo books continued to increase, rising to +4.1% from +3.0%. Moreover, the unweightedmean change in the second-half of 2024, for the respondents who expanded their repo books, recovered to +41.0% from +27.1% in June. For those who contracted their books, the change increased slightly to -20.3%from -19.2%. There was also little change in the weighted-mean change across all repo books, which was +3.9%compared with +4.1%. The contraction in aggregate value of the repo books of the survey sample was therefore driven by big reductions by a few respondents.

The estimated turnover of the survey sample

Respondents accounting for almost 47% of the total value of the latest survey reported their repo turnover over the six months since the previous survey. Grossing up this reported <u>turnover</u>, by the combined share of the outstanding value of the survey of those respondents who did not report their turnover, suggests that the daily average turnover for the whole survey sample over the second-half of 2024 could have been EUR 2,726 billion per day, up +39% from the previous survey to a similar level in December 2023.

Faster turnover but lower outstanding value would suggest a shortening of the average term-to-maturity, but this is inconsistent with the seasonal lengthening of tenors ahead of the end-year, which has been confirmed in the survey statistics and by published SFTR data. The estimated turnover of the survey sample therefore remains a number that needs to be treated with caution.

Comparing survey and SFTR data

Data published under the Securities Financing Transactions Regulation (SFTR) in the EU and the UK show that the value, on December 13, 2024 – the SFTR reporting date closest to the latest survey date – of all outstanding repos reported to regulators was EUR 13,280 billion in the EU and EUR 10,502 billion in the UK, totaling EUR 23,782 billion (see Figure 2.3). This compares with a total of EUR 23,837 billion on June 14, 2024 (the SFTR reporting date closest to the previous survey date) and represents a decrease of -0.2%, which was smaller than the fall in the headline number of the survey sample. It also shows that the size of the survey was equivalent to almost 46% of the EU and UK SFTR total, down from some 47% in June and 48% in December 2023. While any comparison needs to be treated with caution, given the differences in methodologies and coverage, the survey clearly continues to cover a significant share of the European repo market.

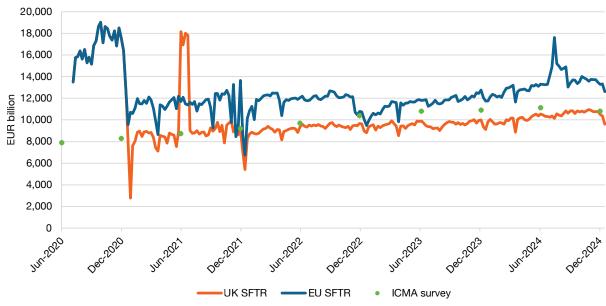


Figure 2.3 - ICMA survey versus SFTR public data: outstanding amounts

Sources: DTCC, KPDW, LSEG, RegisTR, author's calculations

Turnover in reported under SFTR between the week ending December 13, 2024, and the week ending June 14, 2024 – approximately the same interval as that covered by the survey – averaged EUR 2,886 billion per day in the EU and EUR 2,362 billion per day in the UK, totaling EUR 5,248 billion, compared with a corrected total of EUR 4,909 billion in the previous semester (see Figure 2.4). This represents a rise of +6.9% over the previous sixmonth average. The turnover estimated in the survey (EUR 2,726 billion a day) rose to almost 52% of the SFTR total from under 40% in June.

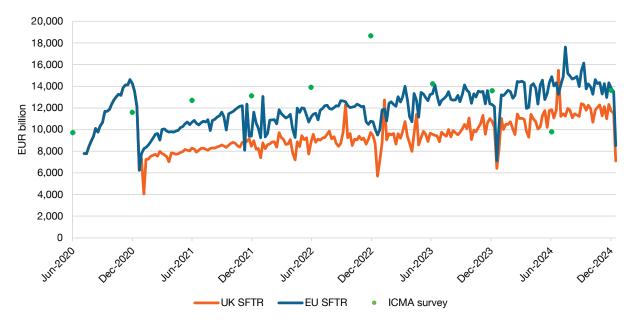
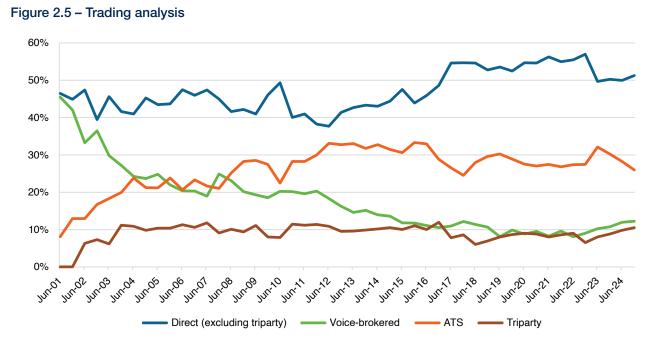


Figure 2.4 - ICMA survey versus SFTR public data: weekly turnover

Sources: DTCC, KPDW, LSEG, RegisTR, author's calculations

UK and EU SFTR data for 2024 are reviewed in appendices attached to this report.

Trading analysis (Q1.1)



The share of repo traded on <u>automatic</u> trading systems (ATS) outstanding on the books of the survey sample continued to retreat from its recent peak in June 2023. The counterparts to that decline were further growth in the shares of voice-brokered and directly-transacted business, both tri-party and in bilaterally-managed.

Tri-party repo

The survey share of tri-party repo rose to 10.5% from 9.8% in June and its value reached a new all-time high of EUR 1,135.5 billion from EUR 1,083.8 billion.⁴ This was despite a decreasing number of the survey sample reporting the use of tri-party agents.

Gross cash borrowing by the survey sample as a share of the combined tri-party gross borrowing and lending positions contracted to 73.1% from 76.1%. And the net cash borrowed through tri-party repo by the survey sample fell back to the equivalent of 4.8% of the total survey size from 5.1% in June.

| | Decemb | per 2024 | June | 2024 | Decemb | per 2023 |
|--------------------|--------|----------|-------|-------|--------|----------|
| | share | users | share | users | share | users |
| direct | 61.8% | 61 | 59.8% | 61 | 59.0% | 60 |
| of which tri-party | 10.5% | 39 | 9.8% | 40 | 8.8% | 42 |
| voice-brokers | 12.2% | 41 | 12.0% | 41 | 10.7% | 41 |
| ATS | 26.0% | 48 | 28.2% | 47 | 30.2% | 47 |

Table 2.2 – Trading analysis

Notwithstanding the increased share of tri-party repo in the survey, the growth in the outstanding value managed and reported directly by the two ICSDs (International Central Securities Depositories) and SIS (in Switzerland) decelerated sharply to +1.2% from +19.5%, reaching only EUR 813.0 billion, compared with EUR 803.4 billion in June.⁵ The rate of growth in tri-party repo managed by global custodians was little different from that of the ICSDs and SIS over 2024.

⁴ The actual share of tri-party repo of the survey sample is thought to be higher than the reported share, given that some respondents, who are known to use triparty services, did not report their tri-party business.

⁵ The ICSDs are Clearstream Banking Luxembourg and Euroclear Bank

In addition to the reported by the ICSDs and SIS, there is an estimated EUR 96 billion of tri-party reported balances held by the DBV (Delivery By Value) tri-party system operated by Euroclear UK and Ireland (EUKI, formerly, CREST).

While the data from tri-party agents suggests that the recovery of tri-party repo may have lost some momentum over the second-half of 2024, despite the switch from QE to QT by central banks, it would appear that the survey sample was an exception and made more intensive use of tri-party repo.

Growth in tri-party repo continued to become less dependent on GC financing in the second-half on 2024. Thus, the share of GC financing fell back to 13.5% from 15.2% of tri-party positions reported in the survey and to 28.1% from 33.0% of tri-party positions reported directly by the ICSDs and SIS.⁶

The value of GC financing positions reported by the survey sample also contracted and its share of the repo books of the survey sample fell to 1.4% from 1.5% in June. However, there were increases in the value of GC financing and in its share of electronic trading reported directly by the principal ATS in Europe, to 10.3% from 8.3%, suggesting that GC financing was more resilient than other ATS repo.

| | Dec-24 | Jun-24 | Dec-23 | Jun-23 | Dec-22 | Jun-22 |
|-----------------|--------|--------|--------|--------|--------|--------|
| ATS | 48 | 47 | 47 | 47 | 48 | 45 |
| anonymous ATS | 43 | 43 | 43 | 41 | 43 | 40 |
| voice-brokers | 41 | 41 | 41 | 41 | 32 | 36 |
| tri-party repos | 39 | 40 | 42 | 44 | 49 | 42 |
| total | 61 | 61 | 60 | 62 | 61 | 56 |

 Table 2.3 – Numbers of respondents reporting particular types of business

Automatic trading systems (ATS)

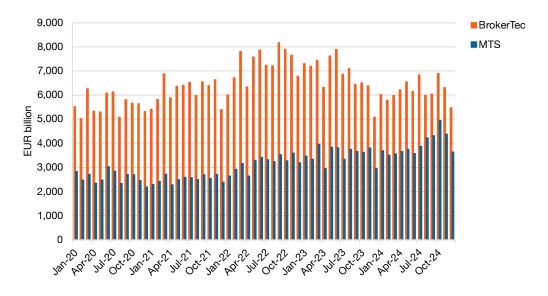
The decline in the share of repo books transacted by the survey sample across ATS took that segment to 26.0% from 28.2% in June. This contraction takes ATS repo in the latest survey to well below the peak of 32.1% achieved in June 2023. That peak was the product of a concatenation of circumstances: the return of Italian and Spanish banks into the repo market, as the ECB unwound its assistance (in particular, its TLTRO III facility); a shift of official deposits into the market from central banks as they cut their remuneration rates; and intensified liquidity management in the wake of the failures of Credit Suisse and US regional banks in the first-quarter of 2024.

Some of those drivers had run their course by the second-half of 2024, as indicated by a contraction in the outstanding value of ATS-traded repos reported directly by the principal platforms in Europe of -10.7%, compared to growth of +11.3% in the first-half of 2024. As a result, outstanding value fell back from an all-time high of EUR 1,764.0 billion in June to EUR 1,575.6 billion, which was very close to its level in December 2023.

Part of the contraction in the share of ATS repo may also be the result of the increase in US dollar repo trading (see the section below on the currency composition of the survey). Note that dollar trading on ATS in Europe is insignificant (0.4% of the outstanding value reported directly by the principal ATS in Europe).

A further insight can be gleaned from the monthly turnover figures reported by BrokerTec and MTS, the two largest repo ATS in Europe. These showed a mixed picture in interdealer electronic trading (see Figure 2.6a).

⁶ GC financing repos are transactions cleared on CCPs and managed by tri-party agents. The largest GC financing facility in Europe is Eurex's GC Pooling service but facilities are also provided by LCH SA's €GCPlus and LCH Ltd's Term£GC.

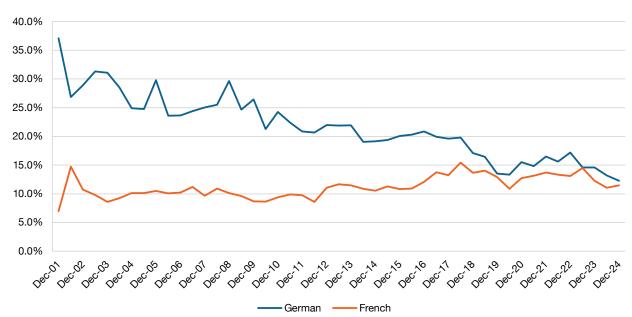




Sources: CME, Euronext

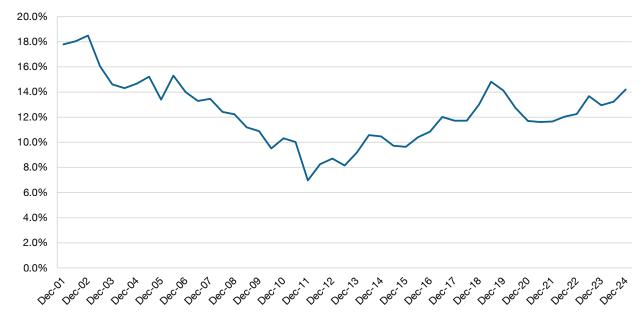
At BrokerTec, there was a step-down in activity in 2024 of just under 10%, whereas activity in MTS grew modestly in the first-half and strongly in the second.

BrokerTec may have suffered disproportionately from the reduction in the trading of German and French government securities, in which it has the largest market shares (see Figure 2.6b). The scarcity of these bonds, that was created by QE, disappeared with QT and with the ramping up of net issuance by governments. This was apparent in the dearth of "specials" in the European repo market (that is, specific securities that trade at repo rates materially below the GC or general collateral repo rate, because of heavy demand for those securities). In addition, political uncertainty stoked by elections may have dampened investor appetite for these traditional safe assets (swap spreads on German government securities became negative in November and the yields on French government bonds rose to levels higher than some peripheral eurozone collateral). BrokerTec may also have been hit by intensified competition from established and new ATS.





In contrast, business at MTS may have been sustained by its dominance of Italian government bond repo, which has benefited from the return of Italian banks to the repo market, as the ECB withdrew longer-term financing. This has been manifest in an uptrend in the share of Italian collateral in the survey since 2021 (see Figure 2.6b). MTS has also been making vigorous efforts to expand its market share in repos against non-Italian collateral.





At Eurex, which is the third major repo ATS in Europe, turnover on its two platforms on a term-adjusted basis peaked in the second-half of 2023, although it remained elevated (see Figure 2.7a). Thus, monthly term-adjusted average daily turnover on Eurex Repo Special and GC (ERSGC) averaged EUR 150.2 billion over December 2024, down from an updated EUR 166.7 billion over June (-9.9%). Over the same periods, GC Pooling (GCP) contracted to EUR 133.2 billion per day from an updated EUR 156.7 billion (-15.0%). The peaking of GCP activity seems to have reflected the reductions by central banks in the rates of remuneration paid on official deposits, which triggered flow back into the repo market and largely into Eurex (attracted by CCP-clearing, access to central bank refinancing and longer terms), as well as new business from some non-bank financial institutions seeking to diversify access to liquidity, particularly at end-year.



Figure 2.7a - Monthly average daily term-adjusted turnover on Eurex repo trading systems

Sources: Eurex, author's calculations

On an estimated unadjusted basis, there was a distinct step-up in turnover on GCP in 2024 from the last three quarters of 2023 (see Figure 2.7b). But, whereas most of the growth in the term-adjusted turnover on GC Pooling in 2023 reflected the lengthening of tenors, rather than new transactions (the term-adjustment multiplier was about 10), the step-up in 2024 was largely in unadjusted turnover (the multiplier declined to about five), although the occasional lengthening of tenors (in March/April, July and November) continued to periodically boost term-adjusted numbers.





Sources: Eurex, STOXX, author's calculations

Turnover on MTS – which publishes monthly turnover data that are both unadjusted and term-adjusted – also showed a temporary lengthening of terms in March and July (as in Eurex GCP), as well as in September/October. Otherwise, term-adjustment seems to have had little impact on changes in positions built up through MTS, with an average multiplier of about less than three (see Figure 2.8).

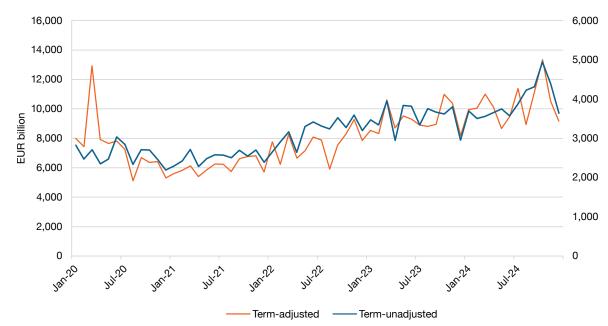


Figure 2.8 – Average daily term-adjusted and unadjusted turnover on Euronext MTS

Source: Euronext

ATS activity, as reported separately by the platforms, remains overwhelmingly CCP-cleared, although the share of CCP-clearing fell back slightly to 96.3% from 96.8%. However, excluding SIS (which is not linked to a CCP) increases the share of CCP-cleared repos to 99.9%.

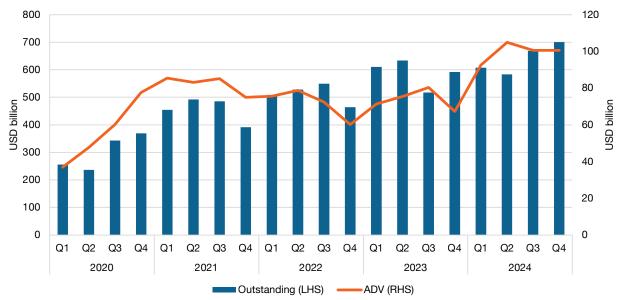
Automated trading systems

The ICMA survey receives data directly from both of the principal <u>automated</u> repo trading systems operating in the dealer-to-customer (D2C) space in Europe. These are GLMX and Tradeweb. The two platforms account for most of <u>automated</u> D2C trading in Europe.⁷ Their combined growth over the second-half of 2024 was +25.9% in average daily turnover semester-on-semester and +18.8% in outstanding value. This compared with +37.4% and 25.1%, respectively, over the first-half of 2024. The strong trend growth in the automation of trading in the D2C segment, much of it driven by hedge funds, therefore decelerated in the second-half of 2024.⁸ However, subsequent reports suggest that it is unlikely that the electronification of the D2C repo market will slow down in 2025.

Turnover on Tradeweb's European platform jumped over the first-half of 2024, only to fall back slightly over the second-half, to finish at USD 100.6 billion per day. Growth in turnover was therefore only +1.9% semester-on-semester, but +36.4% year-on-year (see Figure 2.9). On the other hand, outstanding balances recovered sharply in the second-half, reaching USD 700.0 billion by the end of the year, which represented growth of +20.1% semester-on-semester and +18.4% year-on-year. Stagnant turnover versus buoyant outstandings implies a further lengthening of tenors on Tradeweb.

⁷ Automated trading systems typically employ a request-for-quote (RFQ) trading protocol and are mainly used for dealer-to-client (D2C) business, whereas ATS almost exclusively execute interdealer business (although some have RFQ options). The leading RFQ repo platforms in Europe are Tradeweb and GLMX. Other platforms include BrokerTec Quote, MTS BondVision and some which are largely for securities lending or equity repo, or reportedly have only modest business.

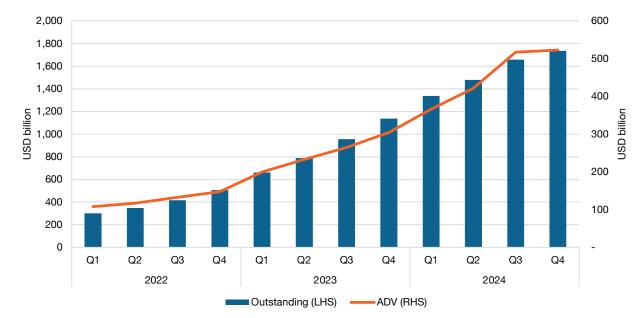
⁸ A recent ECB blog estimated that about 10% of the business of eurozone banks reported under the Money Market Statistical Reporting Regulation is with hedge funds.





Source: Tradeweb

On GLMX, the rate of growth in average daily turnover in Europe, and in outstanding balances, flattened in Q4, the first significant deceleration in growth since their data have been available (see Figure 2.10). Nevertheless, strong growth in Q3 meant that turnover over the second-half of 2024 averaged USD 520 billion per day, compared with USD 394 billion in the first-half, an increase of +31.9% semester-on-semester and +82.3% year-on-year. The value of outstanding repo negotiated across GLMX grew by +52.5% semester-on-semester and +17.4% year-on-year, to USD 1,735 billion from USD 1,478 billion.





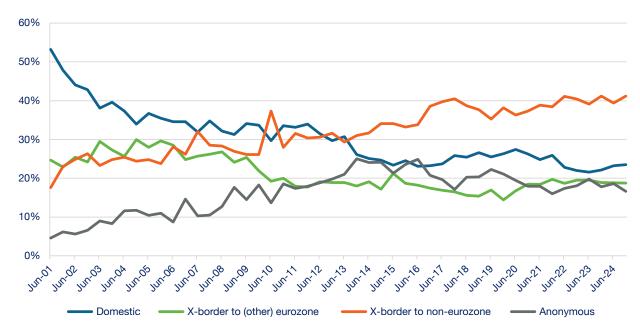
Source: GLMX

Geographical analysis (Q1.1)

Table 2.4 – Geographical analysis

| | Decemb | er 2024 | June 2 | 2024 | Decemb | oer 2023 |
|---|--------|---------|--------|-------|--------|----------|
| | share | users | share | users | share | users |
| domestic | 23.5% | | 23.2% | | 22.1% | |
| cross-border to (other) eurozone | 18.8% | | 18.8% | | 18.9% | |
| cross-border to (other) non-eurozone | 41.2% | | 39.4% | | 41.2% | |
| anonymous | 16.6% | 43 | 18.6% | 43 | 17.8% | 43 |

Domestic positions continued to slowly regain share, mainly at the expense of **anonymous** (CCP-cleared) business, which reflected the overall decline in the share of ATS repo. **Cross-border** business into and out of the eurozone continued its upward trend, but the recovery in cross-border business within the eurozone faded.





There has been a strong correlation over the span of the survey between the level of cross-border business into and out of the eurozone and activity in currencies other than the euro and sterling (see Figure 2.11b), which means that this segment of cross-border trading has benefited from the continued growth in dollar repo. Put a different way, the sub-set of trading which is domestic, cross-border within the eurozone and anonymous (CCP-cleared) is mainly in euro and, to a lesser extent, sterling. This is to be expected, given that domestic business is largely in domestic currencies, that trading within the eurozone and the UK is naturally skewed towards the euro and sterling, and that the trading systems and CCPs supporting anonymous trading in Europe are overwhelmingly concentrated in those two currencies.⁹

⁹ ATS repo positions, as reported directly by the major ATS, are overweight in euro (88.8%) and underweight in sterling (7.6%), when compared with the survey sample (53.1% and 13.2%, respectively).

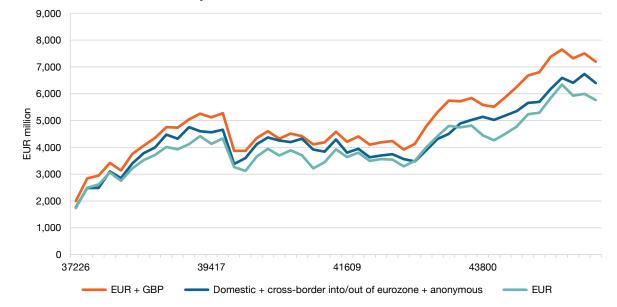




Table 2.5 - Geographical comparisons in December 2024 (June 2024)

| | main survey | ATS | tri-party |
|--------------|---------------|---------------|---------------|
| domestic | 23.5% (23.2%) | 21.5% (21.6%) | 24.8% (28.6%) |
| cross-border | 59.9% (58.2%) | 78.5% (78.4%) | 75.5% (71.4%) |
| anonymous | 16.6% (18.6%) | | |

In the data reported directly by the ATS, the share of business within the eurozone came off its peak in June, which followed a sharp acceleration in automatic electronic trading after June 2022 (see Table 2.5 and Figure 2.12). Some of this hike in the share of intra-eurozone business was driven by growth in GC financing on Eurex GCP, but it overwhelmingly reflected the return of Italian banks into the repo market since 2021.

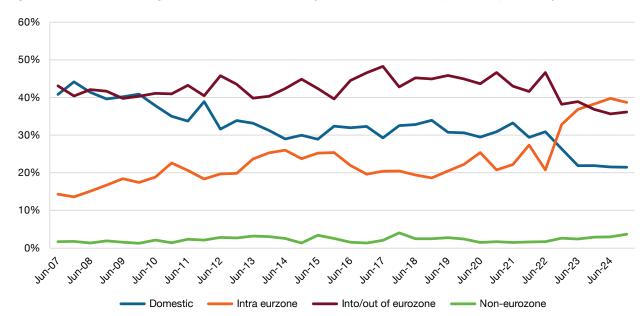


Figure 2.12 - Outstanding value of ATS business by location of counterparties reported by the ATS

Sources: CME, Eurex, Euronext, SIX, TP ICAP

The share of APAC counterparties decreased to 3.6% of the repo books of the survey sample from 4.2% in June and a peak of 6.8% in December 2022.

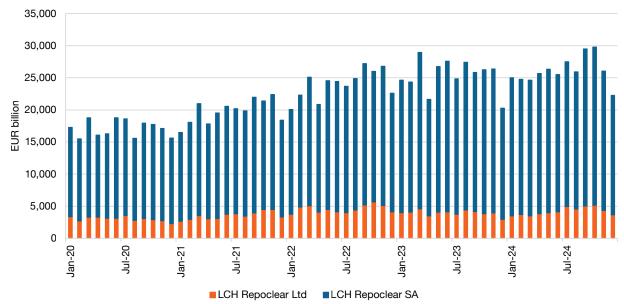
Clearing analysis (Q1.2 and Q1.8)

The outstanding value of **anonymous (CCP-cleared) repo trading** by the survey sample, excluding GC financing, retreated by -7.4% to EUR 1,566.7 billion in December 2024 from EUR 1,691.4 billion in June.

GC financing by the survey sample fell back to EUR 155.7 billion from EUR 289.5 billion (-46.2%), which meant that its share of the survey sample dropped to 1.5% from 2.7%.¹⁰

Overall, anonymous positions contracted to 16.6% of the survey sample from 18.6% in June. Given the intimate link between CCPs and ATS, it is apparent that CCP-clearing was hit by weaker trading on ATS.

The fall in the share of CCP-clearing in the survey data was consistent with data published by LCH RepoClear, which is the largest repo CCP in Europe (see Figure 2.14). Between the June and December 2024 survey dates, the outstanding nominal collateral balances of repos cleared at LCH Ltd (sterling-denominated repo) --- calculated using the ICMA survey methodology --- fell by -15.9%, compared with a recovery of +14.2% over the first-half of 2024. Balances at LCH SA (euro-denominated repo) fell by -3.1%, compared with -2.3%. The overall declines were -4.8% and -0.4%, respectively.

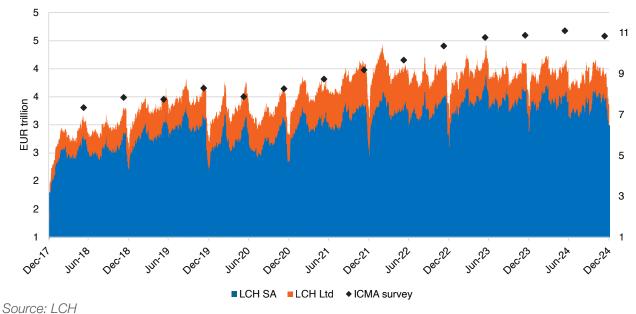


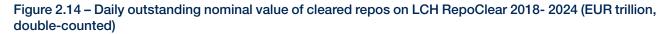


Source: LCH

In contrast to outstanding balances, there was a more bullish picture of CCP-clearing in terms of turnover. Data from LCH RepoClear showed growth in the monthly nominal value of CCP-cleared collateral accelerating to +5.9% over the second-half of 2024 from +0.6% in the first-half (see Figure 2.13). This was the net result of growth of +22.5% in turnover on LCH SA and +3.0% on LCH Ltd, compared with changes of -1.7% and +1.0%, respectively, over the first semester. These turnover figures imply that some of the reduction in outstanding balances of CCP-cleared repo may have been due to a shortening of average tenors and/or smaller deal size.

¹⁰ There is a difference with the numbers on GCF repo in the section above on tri-party repo. This is due to inconsistent reporting in the latest survey.





In the case of Eurex Clearing AG (ECAG) --- which is the CCP for ERSGC and GCP --- and for which outstanding data using the ICMA methodology has been available since 2021, it can be seen that the outstanding nominal value of CCP-cleared collateral traded on ERSCG levelled off over 2023, while GCP peaked in the second-half of that year.

It is noticeable that both platforms show significant activity in the last quarter of the year, reflecting increases in term activity ahead of the usual end-year squeeze on dealer balance sheets.

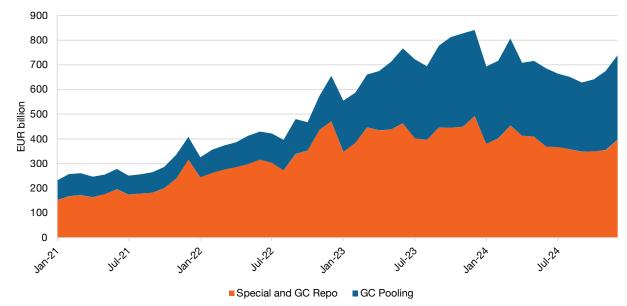
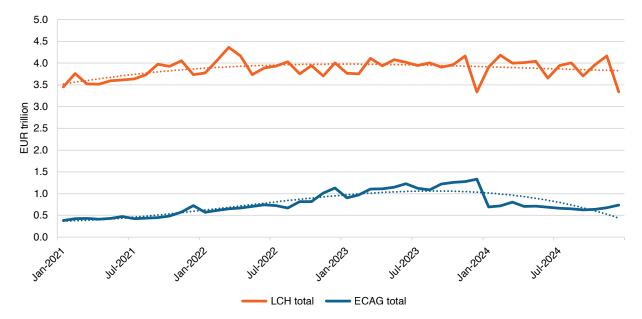


Figure 2.15 - Daily outstanding value of cleared repos on ECAG 2021-23 (EUR trillion, double-counted)

Source: ECAG

Figure 2.16 shows that the share of outstanding cleared balances at LCH fell back to 81.9% of the combined outstanding value at LCH and ECAG at end-December 2024, compared with 84.2% in June and 71.4% in December 2023. These numbers exclude the share of Euronext (formerly, CC&G), which largely clears Italian government repo, as data are not published. However, a significant share of its clearing activity is thought to be passed to LCH SA via a link between the two CCPs. There are also small repo CCP-clearing operations in Poland and Spain.





While the bulk of CCP-clearing is of repos transacted on ATS, a declining proportion of trading continued to be directly between parties and then registered with a CCP post-trade (see Figure 2.17). The share of this post-trade clearing by the survey sample was 3.9% in December, up from 3.4% in June, but well down from the recent peak of 14.1% in December 2020.

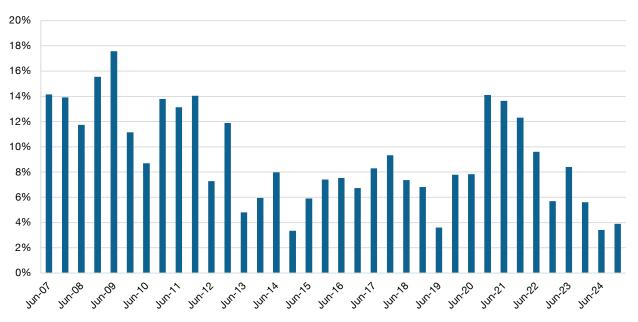
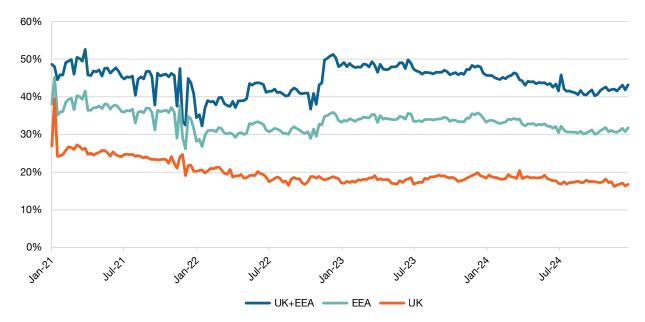


Figure 2.17 – Post-trade CCP-clearing

The value of outstanding CCP-cleared repo in SFTR public data for the UK and EU shrank between the June and December ICMA survey dates by -5.0% and -1.0%, respectively, and by -2.0% for Europe as a whole. This compares with growth rates of +10.5%, +6.3% and +7.3%, respectively, in the previous semester. The share of reported CCP-clearing therefore continued to weaken over the second-half of 2024. In the UK, it fell to 17.1% from 18.0%. But in the EU, the recent decline in CCP-clearing slowed and its share only declined to 43.1% from 43.5%. The combined share of CCP-clearing in EU and UK SFTR public data decreased to 31.6% from 32.2% (in the ICMA survey, it was 20.5% in December and 22.0% in June).





Sources: DTCC, KPDW, LSEG, RegisTR, author's calculations

The value of CCP-cleared turnover reported under SFTR between ICMA survey dates grew by +15.0% in the EU, but fell by -2.3% in the UK. In Europe as a whole, CCP-cleared turnover grew by +10.3%. This compares with growth rates of +3.3%, +3.5% and +3.3%, respectively, in the first-half of 2024. However, the share of new repos that were CCP-cleared continued to decline in the EU in the second semester, touching 50.5% from 52.2% in the first-half, but it recovered in the UK, reaching 25.0% from 24.6% (see Figure 2.19).

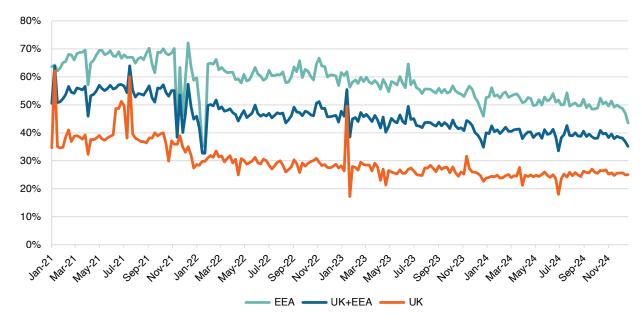


Figure 2.19 - Share of new CCP-cleared repos reported under SFTR (EUR trillion)

Sources: DTCC, KPDW, LSEG, RegisTR, author's calculations

Cash currency analysis (Q1.3 and Q1.4)

The trend growth in the share of the US dollar continued, reflecting trading interest created by expectations of interest rate cuts by the Federal Reserve (manifest in further heavy basis trading and inflows into money market funds that were often reinvested in repos), as well as high interest rates and bond yields, the distribution of the record new issuance of US Treasuries and the parking of cash in the repo market that flowed out of the US equity market whenever that there was an equity sell-off.

| | December 2024 | June 2024 | December 2023 |
|------------------|---------------|-----------|---------------|
| EUR | 53.1% | 53.9% | 54.4% |
| GBP | 13.2% | 13.6% | 12.8% |
| USD | 24.8% | 23.3% | 22.2% |
| DKK, SEK | 1.2% | 1.0% | 1.2% |
| JPY | 4.8% | 5.4% | 7.4% |
| CHF | 0.6% | 0.3% | 0.2% |
| other APAC | 0.9% | 1.1% | 0.8% |
| other currencies | 1.5% | 1.3% | 1.0% |
| cross-currency | 1.6% | 1.7% | 1.6% |

Table 2.6 – Cash currency analysis

The counterparts to the growth in the share of the dollar were further declines in the shares of the euro and the yen. The share of sterling was little changed, although there were reports that the trading of gilt repo was being depressed by tight liquidity, increased funding costs and balance sheet constraints on intermediaries (Figure 2.20 and Table 2.6).

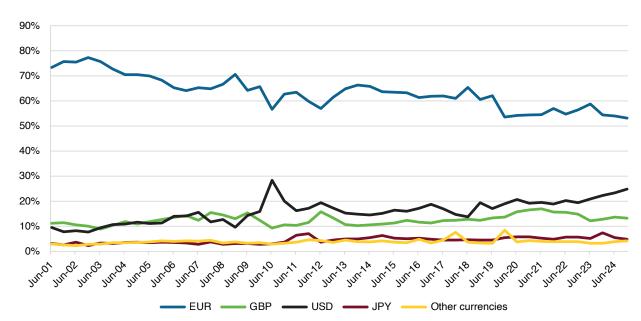


Figure 2.20 – Currency analysis

Tri-party repo, as reported directly by the ICSDs and SIS, saw the shares of the euro and yen (but not other Asian currencies) continue to contract, while those of the dollar and sterling expanded (see Table 2.7).

Cross-currency tri-party repo, reported directly by the ICSDs and SIS, collapsed to 22.0% from the high of 49.2% touched in June.

| | main survey | ATS | tri-party |
|------------------|---------------|---------------|---------------|
| EUR | 53.1% (53.9%) | 88.8% (89.7%) | 65.0% (69.4%) |
| GBP | 13.2% (13.6%) | 7.6% (7.2%) | 8.6% (7.6%) |
| USD | 24.8% (23.3%) | 0.4% (0.3%) | 23.8% (20.9%) |
| DKK, SEK | 1.2% (1.0%) | 0.0% (0.0%) | 0.5% (0.2%) |
| JPY | 4.8% (5.4%) | 0.0% (0.0%) | 0.5% (0.7%) |
| CHF | 0.6% (0.3%) | 3.2% (2.7%) | 0.3% (0.3%) |
| other APAC | 0.9% (1.1%) | - | 0.7% (0.2%) |
| other currencies | 1.5% (1.3%) | 0.1% (0.1%) | 0.6% (0.8%) |
| cross-currency | 1.6% (1.7%) | - | 22.0% (49.2%) |

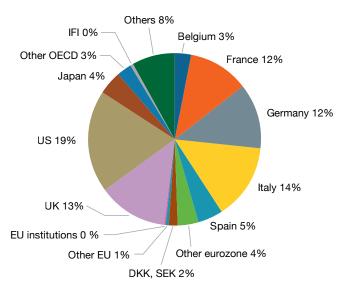
Table 2.7 - Currency comparison in December 2024 (June 2024)

Sources: Clearstream, Euroclear, SIS

Collateral analysis (Q1.9)

The share of US Treasuries in the collateral holdings of the survey sample moved slightly higher to a new all-time high of 15.7% from 15.4% in June, but it remains smaller than the share of cash taken by the US dollar. The difference is thought to be the use of dollars in cross-currency repo against non-dollar collateral (see Table 2.8). US Treasuries remained the largest collateral holding of the survey sample, followed by Italian government securities (13.0%) and UK gilts (11.9%).

Figure 2.21a - Collateral analysis (main survey)



The growth of US Treasuries was largely reflected in a drop in the share of EU government securities, in particular, German government securities. There were also drops in the weights of Japanese and Spanish securities. Pfandbrief surrendered the ground it had made in June in the holdings of the survey sample, but not in tri-party repo.

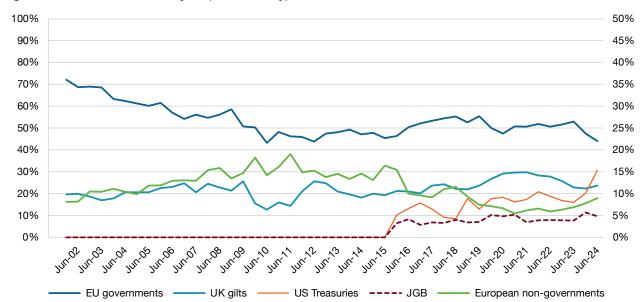


Figure 2.21b – Collateral analysis (main survey)¹¹

On the other hand, the growth in the share of Italian securities accelerated, there was a modest recovery in French securities and further significant growth in eurobonds, albeit from a low base. There was little change in the share of UK securities.

Overall, the share of government securities as a percentage of European issues recovered a little to 86.3% from a recent low of 85.7%, having fallen from an all-time high of 91.5% in June 2022.

Securities issued by the EU being held as repo collateral by the survey sample remained at 0.4% of the collateral holdings of the survey sample.

11 The drop in the share of "other OECD" securities in December 2015 largely reflected the carving out of US and Japanese securities.

| | December 2024 | June 2024 | December 2023 |
|----------------------------|---------------|-----------|---------------|
| Germany | 12.3% | 13.2% | 14.6% |
| Italy | 14.2% | 13.2% | 12.9% |
| France | 11.5% | 11.1% | 12.3% |
| Belgium | 3.1% | 3.3% | 2.8% |
| Spain | 4.7% | 5.4% | 5.2% |
| other eurozone | 4.0% | 4.3% | 4.2% |
| DKK, SEK | 1.6% | 1.4% | 1.6% |
| former EU Accession | 0.5% | 0.7% | 0.3% |
| EU institutions | 0.4% | 0.4% | 0.3% |
| UK | 12.9% | 12.8% | 12.6% |
| international institutions | 0.5% | 0.5% | 0.6% |
| US Treasuries | 15.7% | 15.4% | 10.1% |
| other US | 3.7% | 3.5% | 2.5% |
| Japan government | 4.2% | 4.8% | 5.7% |
| other Japan | 0.2% | 0.1% | 1.5% |
| other OECD ex APAC | 2.8% | 2.3% | 6.2% |
| other APAC OECD | 0.8% | 0.7% | 0.4% |
| eurobonds | 2.5% | 2.0% | 1.9% |
| other fixed income | 4.5% | 4.7% | 4.1% |
| equity | 0.2% | 0.2% | 0.2% |

Table 2.8 – Collateral analysis

Net lending and borrowing of securities through repo by the survey sample was cut back. UK gilts, Italian and French government securities, and other OECD issues remained among the top five net borrowed securities and were joined by JGB. Net lending of US Treasuries evaporated. German non-government and all Belgian securities continued to see net lending by the survey sample.

Table 2.9 - Collateral analysis - largest net flows to/from survey sample (percentage of survey total)

| net collateral lending | | net collateral borrowing | |
|------------------------|------|--------------------------|------|
| German non-government | 0.7% | UK government | 1.9% |
| Belgian non-government | 0.4% | Italian government | 0.9% |
| Belgian government | 0.3% | other OECD | 0.8% |
| Swedish non-government | 0.2% | French government | 0.6% |
| equity | 0.2% | Other US | 0.5% |
| | | JGB | 0.4% |
| | | other eurobond | 0.2% |

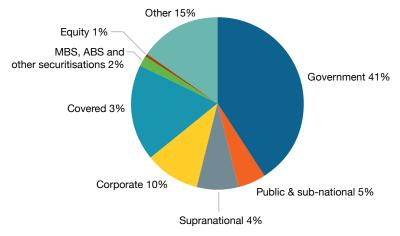
In tri-party repo managed by the ICSDs and SIS, changes in share were obscured by a jump in unattributable "other" securities. However, the value of holdings of supranational issues was largely unchanged; equity collateral (especially convertibles) declined, as did covered bonds; but balances of other securitised assets increased.

| | December 2024 | June 2024 | December 2023 |
|---------------------------------|---------------|-----------|---------------|
| government securities | 41.0% | 44.6% | 34.7% |
| public agencies / sub-nationals | 5.3% | 6.2% | 7.0% |
| supranational agencies | 7.8% | 7.9% | 8.1% |
| corporate bonds | 10.1% | 14.7% | 16.1% |
| covered bonds | 18.1% | 20.8% | 28.2% |
| residential mortgage-backed | 0.7% | 0.7% | 0.9% |
| commercial mortgage-backed | 0.3% | 0.2% | 0.3% |
| other asset-backed | 1.0% | 0.6% | 0.8% |
| CDO, CLN, CLO, etc | 1.6% | 1.0% | 2.1% |
| convertible bonds | 0.3% | 2.6% | 1.3% |
| equity | 0.2% | 0.5% | 0.2% |
| other | 13.6% | 0.2% | 0.2% |

Table 2.10 - Tri-party repo collateral analysed by type of asset

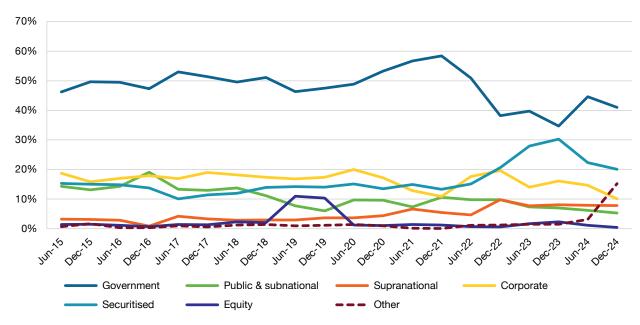
Sources: Clearstream, Euroclear, SIS

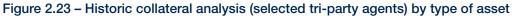




Sources: Clearstream, Euroclear, SIS

In terms of trends, government securities remained the mainstay of triparty repo, although their share was dented between 2022 and 2024 by the increased use of securitised assets. This was largely driven by the flow of covered and other credit bonds back into the repo market following the unwinding of TLTRO III and other facilities by the ECB. Covered bonds remained the second largest type of tri-party repo collateral in the latest survey. Public sector securities continued to trend down, and corporate bonds started to follow, whereas the share of supranational issues trended up.





Sources: Clearstream, Euroclear, SIS

French non-government securities (11.7%) took over from European eurobonds (11.5%) as the largest class of collateral security in tri-party collateral reported directly by the ICSDs and SIS. UK gilts were next with 10.0% and then US Treasuries at 5.9%. The share of US non-government securities grew to 3.0% from 1.6% and Italian government bonds to 4.6% from 3.2%. On the other hand, French government securities dropped to 2.5% from 7.6% in June. Issues by EU institutions accounted for 6.6% of holdings, up from 6.3%, and they remained the fourth largest holding of tri-party collateral.

| Table 2.11 - Triparty repo collateral analysed by issuer - largest changes (difference in percentage points |
|---|
| of survey total) |

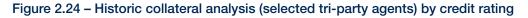
| increases | | decreases | |
|-------------------------------|-------|---|-------|
| French non-government | +5.0% | French government | -5.1% |
| UK government | +2.3% | JGB | -1.4% |
| US Treasuries | +1.6% | UK non-government | -1.3% |
| Spanish government | +1.5% | Irish non-government | -1.0% |
| Italian government | +1.4% | Other eurobonds | -0.9% |
| US non-government | +1.4% | Italian non-government | -0.8% |
| Other OECD | +1.0% | Belgian non-government | -0.7% |
| Luxembourg non- government | +0.4% | Spanish non-government | -0.7% |
| US eurobonds | +0.3% | Dutch non-government | -0.6% |
| EU | +0.3% | Dutch government | -0.6% |
| | | German government | -0.5% |
| | | equity | -0.3% |
| | | international financial institutions | -0.3% |
| | | German non-government | -0.3% |

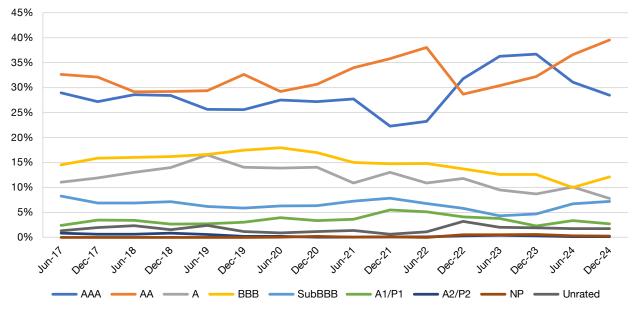
The composition of the credit ratings of tri-party repo collateral holdings continued to shift away from AAA towards AA. There were increases in the shares of BBB ratings and high yield issues (see Table 2.12 and Figure 2.24).

| | December 2024 | June 2024 | December 2023 |
|------------|---------------|-----------|---------------|
| AAA | 28.5% | 31.1% | 36.7% |
| AA | 39.5% | 36.6% | 32.2% |
| А | 7.8% | 10.1% | 8.7% |
| BBB | 12.1% | 10.0% | 12.6% |
| below BBB- | 7.2% | 6.7% | 4.7% |
| A1/P1 | 2.7% | 3.3% | 2.3% |
| A2/P2 | 0.2% | 0.1% | 0.3% |
| Non-Prime | 0.3% | 0.3% | 0.6% |
| unrated | 1.8% | 1.7% | 1.9% |

Table 2.12 - Collateral analysis (selected tri-party agents) by credit rating

Sources: Clearstream, Euroclear, SIS





Sources: Clearstream, Euroclear, SIS

Average haircuts deepened for government securities, but much more so for ABS and financial corporates, and even more so for equity and convertibles. In contrast, other than ABS, securitised assets (including covered bonds, MBS and collateralised assets) benefited from lower haircuts.

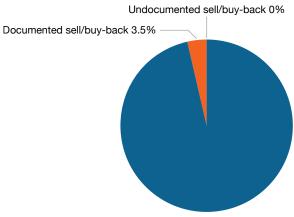
| | December 2024 | June 2024 | December 2023 |
|---------------------------------|---------------|-----------|---------------|
| government securities | 2.6% | 2.2% | 2.3% |
| public agencies / sub-nationals | 2.9% | 3.1% | 3.7% |
| supranational agencies | 2.8% | 2.9% | 3.6% |
| corporate bonds (financial) | 4.6% | 3.8% | 4.3% |
| corporate bonds (non-financial) | 6.9% | 6.9% | 7.1% |
| covered bonds | 1.9% | 2.3% | 2.9% |
| residential mortgage-backed | 5.3% | 5.7% | 4.9% |
| commercial mortgage-backed | 4.3% | 5.4% | 4.5% |
| other asset-backed | 7.2% | 6.3% | 5.3% |
| CDO, CLN, CLO, etc | 5.2% | 6.2% | 8.2% |
| convertible bonds | 9.1% | 5.0% | 9.7% |
| equity | 6.6% | 0.3% | 6.5% |
| other | 3.4% | 2.0% | 5.9% |

Table 2.13 - Weighted-average collateral haircuts (all tri-party agents) analysed by type of asset

Sources: BoNYM, Clearstream, Euroclear, JPMorgan, SIS

Contract analysis (Q1.5)

Figure 2.25 – Contract analysis



Repurchase transactions 96.5%

Table 2.14 - Contract comparison in December 2024 (June 2024)

| | main survey | ATS | tri-party |
|-----------------------------|---------------|---------------|-----------------|
| repurchase transactions | 96.5% (95.8%) | 99.4% (99.5%) | 100.0% (100.0%) |
| documented sell/buy-backs | 3.5% (4.1%) | 0.6% (0.5%) | |
| undocumented sell/buy-backs | 0.0% (0.0%) | | |

Sources: BoNYM, Clearstream, Euroclear, JPMorgan, SIS, CME, Eurex, Euronext, SIX, TP ICAP

In December 2023, the ICMA survey started to ask respondents for the outstanding value of repo business which they had guaranteed or indemnified, including the various forms of "sponsorship". The share of such repos increased to 5.0% of the survey sample from 4.7% in June. The share of the euro fell to 52.1% from 65.2% and that of the dollar increased to 39.8% from 24.2%. It should be noted, however, that only a small number of survey respondents have so far reported this type of activity.

The share of the ICMA Global Master Repurchase Agreement (GMRA) in the number of repo master agreements in place among survey respondents was 85.9%.

Repo rate analysis (Q1.6)

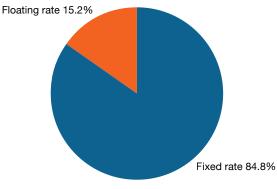
The share of floating-rate repo – which started to expand in 2020 in response to central bank interest rate hikes – fell back in December 2024, to touch 15.2%, down from a peak of 19.7% in December, as central banks began to cut rates (see Table 2.15 and Figure 2.26).

Table 2.15 - Repo rate comparison in December 2024 (June 2024)

| | main survey | ATS | tri-party |
|---------------|---------------|---------------|---------------|
| fixed rate | 84.8% (80.3%) | 97.9% (97.5%) | 88.1% (90.4)% |
| floating rate | 15.2% (19.7%) | 2.1% (2.5%) | 11.9% (9.6%) |

Sources: BoNYM, Clearstream, Euroclear, JPMorgan, SIS, CME, Eurex, Euronext, SIX, TP ICAP

Figure 2.26 – Repo rate analysis



Maturity analysis (Q1.7)

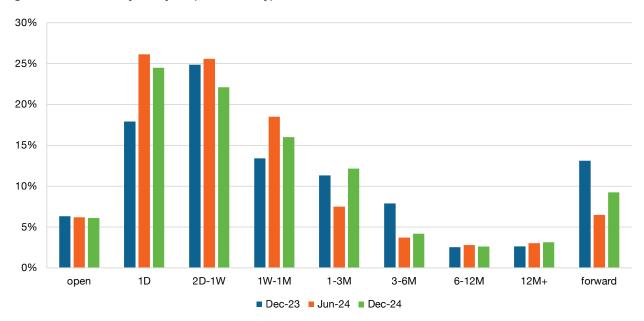
The share of short-dated repo retreated to 62.6% of the books of the survey sample from 70.2% in June, as positions shifted into the one-month to six-month range and into forwards (see Table 2.16 and Figure 2.27). As a consequence, the weighted-average residual term-to-maturity of outstanding repos on the books of the survey sample lengthened to 28-64 days from 26-58 days in June.¹²

¹² The lower end of the range assumes that all transactions have the minimum term in each maturity band: the upper end assumes the maximum and a term of 31 days for open repo.

Table 2.16 – Maturity analysis

| | December 2024 | June 2024 | December 2023 |
|------------------------|---------------|-----------|---------------|
| open | 6.1% | 6.2% | 6.3% |
| 1 day | 24.5% | 26.1% | 17.9% |
| 2 days to 1 week | 22.1% | 25.6% | 24.9% |
| 1 week to 1 month | 16.0% | 18.5% | 13.4% |
| >1 month to 3 months | 12.2% | 7.5% | 11.3% |
| >3 months to 6 months | 4.2% | 3.7% | 7.9% |
| >6 months to 12 months | 2.6% | 2.8% | 2.5% |
| >12 months | 3.1% | 3.0% | 2.6% |
| forward-start | 9.3% | 6.5% | 13.1% |

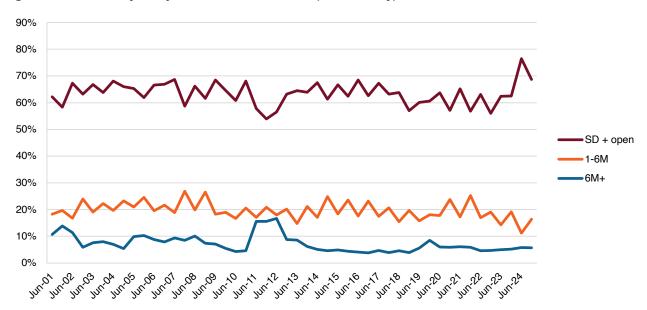
The recovery in forward repo is likely to have reflected pre-positioning ahead of the year-end, when market liquidity dries up.¹³





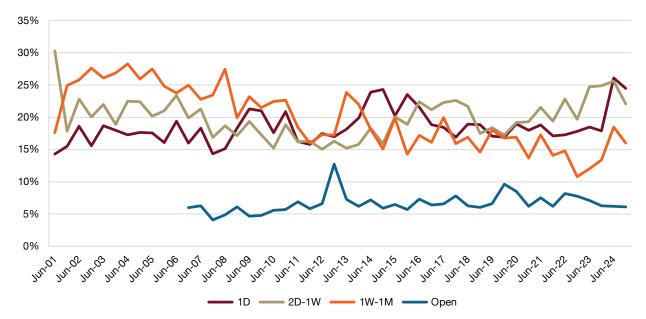
One-month to three-month repo positions held by the survey sample remained highly seasonal, peaking in December and troughing in June (see Figure 2.28). Significant activity in this residual maturity band, and to a lesser extent in the three-month to six-month band, has been driven by collateral swaps. These are exchanges of securities – often conducted by means of back-to-back repos and reverse repos – that are used to manage buffers of high-quality liquid assets (HQLA) required under the Liquidity Coverage Ratio (LCR), especially over end-year. There has also been some seasonality, but in the opposite direction, in open and short-dated repo.

¹³ Forward repos were formerly defined as transactions in which the initial exchange of cash and collateral takes place more than two days in the future and usually weeks or months later. However, this definition captured non-forward repos for later-than-normal settlement, which are referred to as being for "corporate value dates".



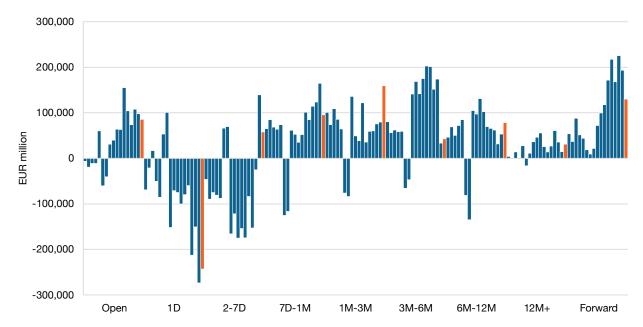


Repos with one day remaining to maturity have become the main tenor in terms of outstanding transactions, replacing two days to one week, which tended to predominate during the period of QE. Longer short-dates (one-week to one-month) have trended down over the period of the survey.





The survey sample remained a net cash borrower from the rest of the market at a residual maturity of one day and a net lender across other terms --- a negative funding gap (that is, borrowing short-term to lend longer-term) --- thereby providing significant aggregate maturity transformation to the rest of the market. However, positions in short-dated maturity bands decreased, while those beyond one month expanded, especially in the one-month to three-month band (see Figure 2.30). Moreover, the aggregate mismatch in the positions held by the survey sample continued to contract, touching 4.2% from 4.9% of the survey in June and 5.5% in December 2023.





Note: Each column represents one survey and each cluster of columns represents the change in the share of a particular tenor over surveys going back to December 2016. The red columns represent the latest two surveys.

The skew seen in June in the average term-to-maturity of ATS repo towards the very short term was maintained in December (see Figure 2.31).

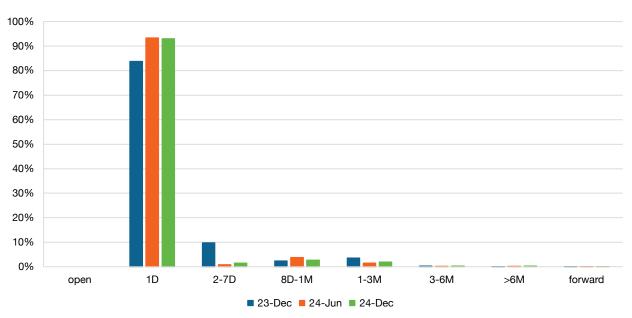


Figure 2.31 – Maturity analysis (ATS)

Sources: CME, Eurex, Euronext, SIX, TP ICAP

In tri-party repo, there were smaller positions in short dates and modest increases in open and one-month to three-month positions, but no major shifts across the maturity distribution.

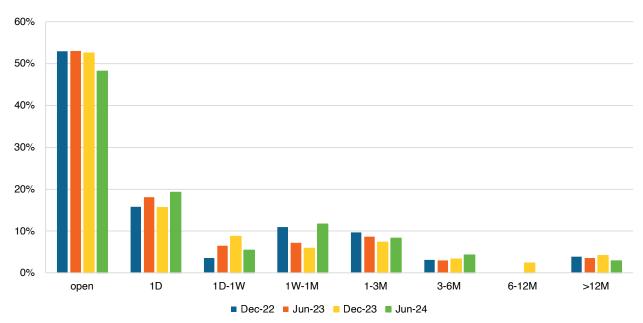


Figure 2.32 - Maturity analysis (tri-party agents)

Sources: Clearstream, Euroclear, SIS

Table 2.17 – Maturity comparison in December 2024 (June 2024)

| | main survey | ATS | tri-party |
|------------------------|---------------|---------------|---------------|
| open | 6.1% (6.2%) | n/a | 38.3% (36.5%) |
| 1 day | 24.5% (26.1%) | 93.1% (93.4%) | 17.1% (16.8%) |
| 2 days to 1 week | 22.1% (25.6%) | 1.5% (0.9%) | 0.0% (0.0%) |
| 1 week to 1 month | 16.0% (18.5%) | 2.7% (3.8%) | 7.6% (10.4%) |
| >1 month to 3 months | 12.2% (7.5%) | 2.0% (1.5%) | 7.9% (6.8%) |
| >3 months to 6 months | 4.2% (3.7%) | 0.4% (0.2%) | 1.8% (2.1%) |
| >6 months to 12 months | 2.6% (2.8%) | 0.3% (0.2%) | 0.0% (0.0%) |
| >12 months | 3.1% (3.0%) | 0.0% (0.0%) | 2.3% (1.6%) |
| forward | 9.3% (6.5%) | 0.0% (0.0%) | |

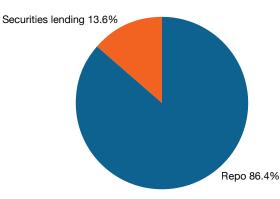
Sources: Clearstream, Euroclear, SIS, CME, Eurex, Euronext, SIX, TP ICAP

Product analysis (Q2)

The ICMA survey measures the securities lending conducted on repo desks as a share of all the securities financing business executed on these desks. The share of securities lending in the latest survey continued its recent recovery from a record low of 9.5% in December 2023 to reach 11.1% in June and 13.6% in December 2024 (see Figure 2.33). The acceleration of growth in December restored the traditional end-year seasonality (when securities lending is used as a way of reducing the balance sheet impact of lending securities by switching to non-cash collateral).

The share of equity loans fell back to 1.0% in December from 4.4%. Fixed-term lending continued to grow (to 72.0% from 62.3%). Domestic lending dropped to 14.6% from 30.0% and cross-border lending within the eurozone contracted to 14.6% from 34.0%, as cross-border lending into and out of the eurozone jumped to 59.3% from 36.0%

Figure 2.33 – Product analysis



The survey sample switched to being a net lender of securities through securities loans, except in domestic and eurozone equity.

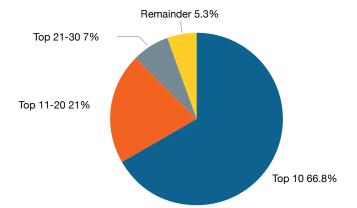
Concentration analysis

The share of the survey sample taken by the top ten respondents in the survey fell back in December. That loss in share was captured by the next 20 respondents (see Table 2.18 and Figure 2.34).

Table 2.18 – Concentration analysis

| | December 2024 | June 2024 | December 2023 |
|--------|---------------|-----------|---------------|
| top 10 | 66.8% | 69.4% | 68.5% |
| top 20 | 87.8% | 88.5% | 88.3% |
| top 30 | 94.7% | 94.4% | 95.0% |
| other | 5.3% | 5.6% | 5.0% |

Figure 2.34 – Concentration analysis



The relative growth of the second and third tiers of the survey sample was reflected in a further reduction in the Herfindahl Index (see Table 2.19).

Table 2.19 – Herfindahl Index¹⁴

| | index | numbers in survey |
|---------------|-------|-------------------|
| December 2003 | 0.045 | 76 |
| June 2004 | 0.040 | 81 |
| December 2004 | 0.047 | 76 |
| June 2005 | 0.043 | 81 |
| December 2005 | 0.043 | 80 |
| June 2006 | 0.042 | 79 |
| December 2006 | 0.050 | 74 |
| June 2007 | 0.041 | 76 |
| December 2007 | 0.040 | 68 |
| June 2008 | 0.044 | 61 |
| December 2008 | 0.049 | 61 |
| June 2009 | 0.051 | 61 |
| December 2009 | 0.065 | 59 |
| June 2010 | 0.105 | 57 |
| December 2010 | 0.064 | 57 |
| June 2011 | 0.074 | 58 |
| December 2011 | 0.065 | 62 |
| June 2012 | 0.062 | 60 |
| December 2012 | 0.054 | 69 |
| June 2013 | 0.046 | 63 |
| December 2013 | 0.046 | 66 |
| June 2014 | 0.046 | 64 |
| December 2014 | 0.043 | 64 |
| June 2015 | 0.044 | 64 |
| December 2015 | 0.041 | 70 |
| June 2016 | 0.050 | 66 |
| December 2016 | 0.056 | 65 |
| June 2017 | 0.052 | 64 |
| December 2017 | 0.049 | 64 |
| June 2018 | 0.053 | 62 |
| December 2018 | 0.060 | 59 |
| June 2019 | 0.054 | 59 |
| December 2019 | 0.059 | 60 |

¹⁴ The Herfindahl Index is the sum of the squares of market shares divided by the square of the sum of market shares. The higher the index, the lower the degree of competition. If the index is higher, the more a single institution has a dominant market share and/or the more insignificant the market shares of all the other survey respondents. A market in which several institutions have very large market shares can therefore have a relatively low index.

| | index | numbers in survey |
|---------------|-------|-------------------|
| June 2020 | 0.069 | 61 |
| December 2020 | 0.062 | 60 |
| June 2021 | 0.064 | 59 |
| December 2021 | 0.060 | 56 |
| June 2022 | 0.063 | 56 |
| December 2022 | 0.057 | 61 |
| June 2023 | 0.060 | 62 |
| December 2023 | 0.065 | 60 |
| June 2024 | 0.063 | 61 |
| December 2024 | 0.058 | 61 |

The lower Herfindahl Index was reflected in the shift down in the furthest segment of the Gini coefficient curve (see Figure 2.35).

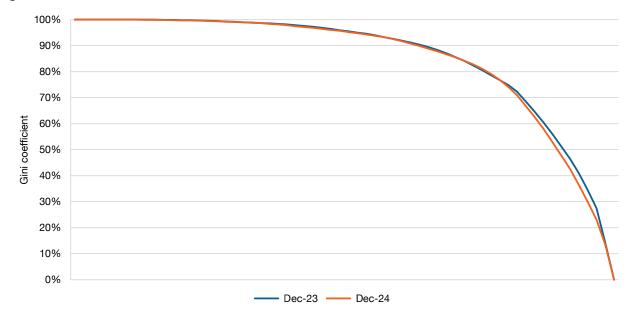


Figure 2.35 – Cumulative distribution of market share

Chapter 3: Conclusion

The European repo market, as represented by the ICMA survey sample, appears to have reached a turning point in December 2024, as the effects of quantitative easing (QE) on the market increasingly gave way to those of quantitative tightening (QT). The former regime was a world of ample liquidity at low or negative rates, but scarce collateral. The latter regime is a world of diminishing liquidity at higher interest rates, but abundant collateral. The aggregate effect on the survey has been a deceleration in the growth of the repo books of the survey sample since 2022 and an outright contraction over the second-half of 2024, from EUR 11.1 trillion in June 2024 to EUR 10.9 trillion in December.

QT means a switch back from a largely securities-driven market to more cash-driven repo. This has become apparent in the decline in the net reverse repo position that was built up by the survey sample as central banks provided large-scale assistance to the market in the aftermath of the eurozone sovereign debt crisis. It is also evident in the recovery in tri-party repo, which was crowded out by central bank liquidity under QE, as well as the return of many investors to the repo market in response to higher interest rates.

However, the contraction in the aggregate position of the survey sample in December may be suggesting that QT, amplified by the increased issuance of government securities, is beginning to constrain the European repo market, by reducing securities-driven trading by more than cash-driven repo is being revived under the new central bank policies of ample reserves and tightly-calibrated operational frameworks.

In addition, there appears to have been another redeployment of balance sheet capacity to the US, on this occasion, to support equity trading and in the light of fewer profitable trading opportunities in Europe, including less scope for basis trading.

Reduced securities-driven trading seems to have had the specific effect of undermining business on some ATS and on CCP-clearing. The asymmetric impact of QT may have been disguised until December by transitional effects, such as the return of Italian banks to the repo market to refinance collateral (including covered bonds) previously posted to the ECB and the migration to GC financing facilities of official deposits previously held at advantageous rates at central banks.

On the other hand, the survey has been boosted by the growing share of the US dollar, although this has reduced the role of ATS in Europe, as these do not trade dollar repo.

In response to the aggregate decline in positions transacted on ATS, the December survey recorded a contraction in anonymous (that is, CCP-cleared) positions to 16.6% from 18.6% in June. SFTR data put the combined share of CCP-clearing in the UK and EU at 31.6%. This contrasts with the growth in CCP-clearing in the US, where preparations continue, albeit with a one-year delay, for the mandatory CCP-clearing of US Treasury repo.

Another pointed contrast with the US repo market is the modest level of guaranteed or indemnified transactions in Europe (even allowing for under-reporting). Equivalent services in Europe have yet to gain anything like the same traction.

About the Author

This report was compiled by Richard Comotto, who is Senior Consultant to the ICMA's European Repo and Collateral Council (ERCC). He is also author of the *Guide to Best Practice in the European Repo Market*, its *Repo FAQs*, the *SFTR Task Force's Repo Reporting Recommendations* and the *CSDR Cash Penalty Best Practice Recommendations and FAQs*, as well as being Course Director of the ICMA Professional Repo Market and Collateral Management Course and of the ICMA-ISLA GMRA-GMSLA Workshop. In addition, Richard provides technical assistance on behalf of ICMA, IMF, World Bank, Asian Development Bank and other organisations to developing repo markets around the world.

Appendix A: Survey Guidance Notes

The data required by this survey are: the total value of the repos and reverse repos booked by your repo desk that are still outstanding at close of business on Wednesday, December 11, 2024, and various breakdowns of these amounts, as well as the total value of all repos and reverse repos turned over the six months since the previous survey (which was on June 12, 2024).

Branches of your bank in other countries in Europe may be asked to complete separate returns. If your repo transactions are booked at *another branch*, please forward the survey form to that branch. If branches of your bank in *other countries* run their own repo books, please copy the survey form to these branches, so that they can also participate in the survey. Please feel free to copy the survey form to other banks, if you discover that they have not received it directly.

Guidance Notes

General guidance

- a) Please fill in as much of the form as possible. For each question that you answer, you will receive back your ranking in that category.
- b) If your institution does not transact a certain type of repo business, please enter 'N/A' in the relevant fields. On the other hand, if your institution does that type of business but is not providing the data requested by the survey, please do not enter anything into the relevant field. If your institution does that type of business but has no transactions outstanding, please enter zero into the relevant field.
- c) You only need to give figures to the *nearest million*. However, if you give figures with decimal points, please use full stops as the symbols for the decimal points, *not* commas. For *nil returns*, please use zeros, *not* dashes or text. Do not use negative signs.
- d) Please do not re-format the survey form, ie change its lay-out, and do not leave formulae in the cells of the underlying spreadsheet.
- e) Include all varieties of repos, ie repurchase transactions (classic repos and pensions livrées) and sell/buybacks (e.g. simultaneas and PCT). There is a separate question (see question 2) on securities lending and borrowing transactions (including securities lending and borrowing against cash collateral).
- f) Exclude repo transactions undertaken with central banks as part of their official money market operations. Other repo transactions with central banks, e.g. as part of their reserve management operations, should be included.
- g) Give the value of the *cash* which is due to be repaid on all repo and reverse repo contracts (*not* the market value or nominal value of the collateral) that are still *outstanding* at *close of business* on Wednesday, December 11, 2024. This means the value of transactions at their repurchase prices.
- h) "Outstanding" means repos and reverse repos with a repurchase date, or which will roll over, on or after Thursday, June 13, 2024. You should include all *open repos* and *reverse repos* that have been rolled over from Wednesday, December 11, 2024, to a later date and all *forward repos and reverse repos* that are still outstanding as forward contracts at close on Wednesday, December 11, 2024.
- i) Give separate totals for (a) repos plus sell/buy-backs and (b) reverse repos plus buy/sell-backs.
- j) The survey seeks to measure the value of repos and reverse repos on a *transaction date basis*, rather than a purchase date basis. This means that you should include all repo and reverse repo contracts that have been agreed <u>before</u> close of business on Wednesday, December 11, 2024, even if their purchase dates are later. An unavoidable consequence of using the transaction date is that tom/next and spot/next transactions that are rolled over will be counted more than once, eg a tom/next repo transacted on the day before the survey date and rolled over on the survey date will feature twice.

- k) Give *gross* figures, i.e. do *not* net opposite transactions with the same counterparty. If this is not possible, please indicate that your figures are net.
- I) Do not report synthetic repos.
- m) You should include *intra-group* transactions between different legal entities or between foreign branches and the parent company.

Guidance on specific questions in the survey form

- 1.1 Transactions (1.1.1) direct with counterparties or (1.1.2) through voice-brokers should exclude all repos transacted over an ATS (see below). These should be recorded under (1.1.3). (1.1.1) should include repos executed on automated systems such as GLMX or TradeWeb (which offer a request-for-quote (RFQ) trading model). Repos executed on automated systems should also be included in (1.2.2), which measures all electronic trading.
- (1.1.2) Transactions through voice-brokers should be broken down in terms of the location of the counterparties, rather than the location of the voice-brokers.
- (1.1.3) "ATSs" are automatic or semi-automatic trading systems (e.g. BrokerTec, Eurex's platforms, MTS, eRepo and SIX Repo) but not voice-assisted electronic systems used by voice-brokers (where voice-brokers record and communicate transactions agreed by telephone or electronic messaging) or automated systems such as GLMX or TradeWeb (which offer a request-for-quote (RFQ) trading model). Nor does use of an ATS include trading assisted by electronic means of structured messages and confirmations such as Bloomberg's RRRA and similar screens.

Transactions on automated trading systems (RFQ systems) should be included in both (1.1.1) and (1.2.2). Transactions through voice-assisted systems should be included in (1.1.2).

Anonymous transactions through an ATS with a central counterparty (e.g. Euronext Clearing (formerly CC&G), LCH, BME Clearing (formerly MEFFClear) and Eurex Clearing) should be recorded in either (1.1.3.4) or (1.1.3.5). (1.1.3.4) is for GC financing systems. These are ATS that are connected to a CCP and a triparty repo service. Examples include Eurex's GC Pooling (GCP), LCH SA's €GCPlus and LCH Ltd's £GC. They do not include GC basket trading on ATS in which the seller manually selects the securities to be delivered from a list prescribed by the ATS. This activity may be cleared across a CCP but does not involve a triparty service and should be recorded in (1.1.3.5).

- (1.2.1) This item includes all the transactions recorded in (1.1.3) <u>plus</u> any transactions executed directly with counterparties and via voice-brokers which are then registered with and cleared through a central counterparty.
- (1.2.2) Questions (1.1.3.1) to (1.1.3.5) measure repos and reverse repos transacted on automatic or semi-automatic trading systems such as BrokerTec, Eurex's platforms, MTS, eRepo and Dealerweb, but not voice-assisted electronic systems used by voice-brokers (where voice-brokers record and communicate transactions agreed by telephone or electronic messaging) or automated systems such as BrokerTec Quote, GLMX, MTS BondVision or TradeWeb (which offer a request-for-quote (RFQ) trading model). Business on automated systems should be reported as direct trades in (1.1.1) and included in (1.2.2), which asks for the total value of business transacted on any electronic trading system, whether automatic, semi-automatic or automated, and therefore including automated systems such as GLMX or TradeWeb, which offer a request-for-quote (RFQ) trading model. Electronic trading Is defined in terms of where the contract is executed and so does not include voice-assisted electronic systems used by voice-brokers or trading assisted by electronic means of structured messages and confirmations such as Bloomberg's RRRA and similar screens.
- 1.5 "Repurchase transactions" (also known as "classic repos") include transactions documented under the Global Master Repurchase Agreement (GMRA) 1995, the Global Master Repurchase Agreement (GMRA) 2000 or the Global Master Repurchase Agreement (GMRA) 2011 *without* reference to the Buy/Sell-Back Annexes, and transactions documented under other master agreements. "Sell/buy-backs" are therefore taken to include all transactions that are not documented. Repurchase transactions are characterised

by the immediate payment by the buyer to the seller of a compensatory or manufactured payment upon receipt by the buyer of a coupon or other income on the collateral held by the buyer. If a coupon or other income is paid on collateral during the term of a sell/buy-back, the buyer does not make an immediate compensatory or manufactured payment to the seller, but reinvests the income until the repurchase date of the sell/buy-back and deducts the resulting amount (including reinvestment income) from the repurchase price that would otherwise be due to be received from the seller. Sell/buy-backs may be quoted in terms of a forward price rather than a repo rate. Where sell/buy-backs are documented (e.g. under the Buy/Sell-Back Annexes to the GMRA 1995, 2000 or 2011), periodic adjustments to the relative amounts of collateral or cash - which, for a repurchase transaction, would be performed by margin maintenance transfers or payments - are made by adjustment or re-pricing. All open repos are likely to be repurchase transactions.

- 1.6 "Open" repos, which are reported in (1.7.3), are defined for the purposes of this survey as contracts that have no fixed repurchase date when negotiated but are terminable on demand by either counterparty. Open repos should also be included in fixed-rate repo (1.6.1) unless their repo rates are linked to interest rate indexes which will be refixed during the life of the repos, in which cases, they would be reported as floating-rate repos (1.6.2).
- 1.7 This section asks for the *remaining* term to maturity (not the original term to maturity) of repos to be broken down as follows:
 - (1.7.1.1) 1 day this means:
 - all contracts transacted prior to Wednesday, December 11, 2024, with a repurchase date on Thursday, December 12, 2024;
 - overnight, tom/next, spot/next and corporate/next contracts transacted on Wednesday, December 11, 2024.
 - (1.7.1.2) 2–7 days this means:
 - all contracts transacted prior to Wednesday, December 11, 2024, with a repurchase date on Friday, December 13, 2024, or any day thereafter up to and including Wednesday, December 18, 2024;
 - contracts transacted on Wednesday, December 11, 2024, with an original repurchase date on Friday, December 13, 2024, or any day thereafter up to and including Wednesday, December 18, 2024 (irrespective of the purchase date, which will vary).
 - (1.7.1.3) More than 7 days but no more than 1 month this means:
 - all contracts transacted prior to Wednesday, December 11, 2024, with a repurchase date on Thursday, December 19, 2024, or any day thereafter up to and including Monday, January 13, 2025;
 - contracts transacted on Wednesday, December 11, 2024, with an original repurchase date on Thursday, December 19, 2024, or any day thereafter up to and including Monday, January 13, 2025 (irrespective of the purchase date, which will vary).
 - (1.7.1.4) More than 1 month but no more than 3 months this means:
 - all contracts transacted prior to Wednesday, December 11, 2024, with a repurchase date on Tuesday, January 14, 2025, or any day thereafter up to and including Tuesday, March 11, 2025;
 - contracts transacted on Wednesday, December 11, 2024, with an original repurchase date on Tuesday, January 14, 2025, or any day thereafter up to and including Tuesday, March 11, 2025 (irrespective of the purchase date, which will vary).
 - (1.7.1.5) More than 3 months but no more than 6 months this means:
 - all contracts transacted prior to Wednesday, December 11, 2024, with a repurchase date on Wednesday, March 12, 2025, or any day thereafter up to and including Wednesday, June 11, 2025;
 - contracts transacted on Wednesday, December 11, 2024, with an original repurchase date on Wednesday, March 12, 2025, or any day thereafter up to and including Wednesday, June 11, 2025 (irrespective of the purchase date, which will vary).

- (1.7.1.6) More than 6 months but no more than 12 months this means;
 - all contracts transacted prior to Wednesday, December 11, 2024, with a repurchase date on Thursday, June 12, 2025, or any day thereafter up to and including Thursday, December 11, 2025;
 - contracts transacted on Wednesday, December 11, 2024, with an original repurchase date on Thursday, June 12, 2025, or any day thereafter up to and including Monday, Thursday 11, 2025 (irrespective of the purchase date, which will vary).
- (1.7.1.7) More than 12 months this means;
 - all contracts transacted prior to Wednesday, December 11, 2024, with a repurchase date on Friday, December 12, 2025, or any day thereafter;
 - contracts transacted on Wednesday, December 11, 2024, with an original repurchase date on or after Friday, December 12, 2025 (irrespective of the purchase date, which will vary).
- (1.7.2) Forward repos are now defined for this survey as contracts with a purchase date of Wednesday, December 18, 2024, or later, in other words, settling on T+5 or later. This definition has been amended to avoid an overlap with corporate/next transactions, which usually settle at T+3 or T+4.
- (1.7.3) Open repos in this field should equal open repos in item (1.6.3).
- 1.8 Please confirm whether the transactions recorded in the questions in (1.6 and 1.7) include your tri-party repo business. Some institutions do not consolidate their tri-party repo transactions with their direct or voice-brokered business because of delays in receiving reports from tri-party agents or the complexity of their tri-party business.
- (1.8.1) and (1.8.2) should not include any repos transacted across GC financing systems and recorded in (1.8.3).
- 1.9 "Eurobonds" (also known as "international bonds") are defined as securities held outside national central securities depositories (CSD), usually in an ICSD such as Clearstream or Euroclear, or a custodian bank; typically with the ISIN prefix XS; often issued in a currency foreign to the place of issuance; and sold cross-border to investors outside the domestic market of the place of issuance. Eurobonds should be recorded in (1.9.30-33), except for those issues by "official international financial institutions", which should be recorded in (1.9.20). Eurobond does not mean a bond denominated in euros.
 - (1.9.20) "Official international financial institutions, including multilateral development banks" such as:

African Development Bank (AfDB) Asian Development Bank (AsDB) Bank for International Settlements (BIS) Caribbean Development Bank (CDB) Central American Bank for Economic Integration (CABEI) Corporacion Andina de Fomento (CAF) Council of Europe Development Bank East African Development Bank (EADB) European Bank for Reconstruction and Development (EBRD) Inter-American Development Bank Group (IADB) International Fund for Agricultural Development (IFAD) Islamic Development Bank (IDB) Nordic Development Fund (NDF) Nordic Investment Bank (NIB)

OPEC Fund for International Development (OPEC Fund)

West African Development Bank (BOAD)

World Bank Group (IBRD and IFC)

Securities issued by the EU (but not individual EU members) should now be included in the new question 1.9.37. EU issuers include:

European Commission

European Financial Stability Mechanism (EFSM)

European Financial Stability Facility (EFSF)

European Investment Bank (EIB)

European Stabilisation Mechanism (ESM)

European Union (EU)

- (1.9.21) "US Treasury" includes bills, notes and bonds, including floating-rate notes, issued by the US central government but not securities guaranteed by that government, such as Agency securities.
- (1.9.23) "Japanese government" includes bills, notes and bonds issued by the Japanese central government but not securities guaranteed by that government.
- (1.9.25) "Other OECD countries" are Australia, Canada, Chile, Iceland, Israel, Korea, Mexico, New Zealand, Norway, Switzerland and Turkey.
- (1.9.26) "Other non-OECD European, Middle Eastern & African countries" should exclude any EU countries.
- (1.9.34) "Equity" includes ordinary shares, preference shares and equity-linked debt such as convertible bonds.
- 2.1 This question asks for the total gross value of transactions with a transaction date on or after June 13, 2024 (the day after the previous survey date), to and including December 11, 2024 (the latest survey date). In other words, it asks for the <u>turnover</u> or flow of business over the six month interval and includes all business transacted since the last survey date, even if it has matured before the survey date. This section is therefore different from the rest of the survey, which asks for the value of business outstanding on the survey date, in other words, the stock of transactions.
- 2.2 This question asks for the <u>number</u> of individual transactions with a transaction date on or after June 13, 2024 (the day after the previous survey date), to and including December 11, 2024 (the latest survey date), even if it has matured before the survey date. In other words, this is the number of tickets written.
- 3 This question asks for the cash value of any repos in which the survey participant is not a principal but provides a guarantee, indemnity or similar credit support. This support could be through a facility such as DTCC Sponsored Repo, LCH Sponsored Clearing or Eurex ISA Direct, or could be a bilateral arrangement.
- 4 "Total value of securities loaned and borrowed by your repo desk" includes the lending and borrowing of securities with either cash or securities collateral. Exclude any securities lending and borrowing done by desks other than your repo desk. If your repo desk does not do any securities lending and borrowing, this line will be a nil return.
- 5.1 "Active" means about once a week or more often.

For further help and information

If, having read the Guidance Notes, you have any further queries, please e-mail the independent survey administrator at <u>reposurvey@icmagroup.org</u>.

Appendix B: Survey Participants

| List of respondents | Dec- 14 | Jun- 15 | Dec- 15 | Jun- 16 | Dec- 16 | Jun- 17 | Dec- 17 | Jun- 18 | Dec- 18 | Jun- 19 | Dec- 19 | Jun- 20 | Dec- 20 | Jun- 21 | Dec- 21 | Jun- 22 | Dec- 22 | Jun- 23 | Dec- 23 | Jun- 24 | Dec 24 |
|--|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|-----------|
| ABN Amro Bank | Х | х | х | | | | | | | | | | | | | | | | | | |
| Allied Irish Banks | × | х | X | х | х | х | х | х | | | | | | | | | | | | | |
| AXA Bank Europe | × | х | X | x | X | x | | | | | | | | | | | | | | | |
| Banc Sabadell | × | х | X | x | X | X | | X | | | | | | | | | | | | | |
| Banca d'Intermediazione Mobiliare (IMI) | × | x | x | x | x | x | x | x | | | | | | | | | | | | | |
| Banca Monte dei Paschi di Siena | × | x | x | x | | | | × | × | x | x | x | × | x | x | x | x | x | x | x | x |
| Banco BPI | × | X | X | x | x | x | X | x | x | x | x | x | x | x | X | x | X | X | X | X | X |
| Banco Santander | X | X | X | x | X | X | X | X | x | X | | | | | | | X | X | X | X | X |
| UniCredit Bank Austria (Bank Austria) | × | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | | x | x | x |
| Bank fuer Arbeit und Wirtschaft und Oesterreichische Postsparkasse (Bawag) | x | x | x | x | x | x | x | x | x | x | x | x | x | х | x | x | x | x | x | x | |
| Bank of Ireland | X | X | × | X | х | X | X | X | × | х | × | х | | | | | | | | | |
| Bank Przemyslowo-Handlowy SA | | | | | | | | | | | | | | | | | | | | | |
| Landesbank Berlin | | | | | | | | | | | | | | | | | | | | | |
| Banque de Luxembourg | × | X | X | X | X | X | X | X | X | х | X | х | X | х | X | X | X | X | X | X | X |
| Banque et Caisse d'Epargne de l'Etat | × | x | x | x | x | x | x | x | × | x | x | x | x | x | x | x | x | x | x | x | x |
| Barclays Capital | X | х | X | х | х | x | х | х | X | х | x | х | х | х | X | х | X | х | х | х | X |
| Bayerische Landesbank | × | x | X | x | X | x | x | x | | x | x | х | x | х | | | | | | | |
| BBVA | × | x | × | x | х | x | x | x | x | x | x | x | x | x | X | X | X | X | X | X | X |
| BHF-Bank | 1 | | | | | | | | | | | | | | | | | | | | |
| BHF-Bank International | | | | | | | | | | | | | | | | | | | | | <u> </u> |
| BNP Paribas | X | X | X | X | X | X | X | X | X | X | x | x | X | x | X | X | X | X | X | X | X |
| Bundesrepublik Deutschland Finanzagentur | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x |
| Caixabank (including Bankia) | X | x | x | x | x | x | x | x | X | | x | x | x | x | x | x | X | × | x | x | x |
| Caixa d'Estalvis de Catalunya | | x | x | | | | | | ~ | | | ~ | | | | | | | | | |
| Bankia SA (formerly Caja de Ahorros y Monte de Piedad de Madrid (Caja Madrid)) | × | x | x | x | × | × | x | × | × | x | × | x | × | | | | | | | | |
| CA-CIB (formerly Calyon) | × | X | X | x | X | x | X | x | X | x | x | x | x | x | X | X | X | X | X | X | X |
| Citigroup | X | x | x | x | X | x | x | x | X | x | x | x | x | х | x | X | X | X | x | x | X |
| Commerzbank | X | x | x | x | X | x | x | x | x | x | x | x | x | X | X | X | X | X | X | X | X |
| Canadian Imperial Bank of Commerce and Credit (CIBC) | x | x | x | | x | x | x | | x | x | x | x | x | x | | | | x | | | |
| Commonwealth Bank of Australia | | | | | | | | | | | | | | | | | x | | | | |
| Confederación Española de Cajas de Ahorros (CECA) | × | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x |
| Credit Suisse Securities | × | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | | | |
| (Europe) Ltd | | | | | | | | | | | | | | | | | | | | | <u> </u> |
| Danske Bank Daiwa Securities SMBC Europe | x x | x | x x | × | X | X | × | X | X | X | X | X | X | X | X | X | X | × | X | × | X |

| List of respondents | Dec- 14 | Jun- 15 | Dec- 15 | Jun- 16 | Dec- 16 | Jun- 17 | Dec- 17 | Jun- 18 | Dec- 18 | Jun- 19 | Dec- 19 | Jun- 20 | Dec- 20 | Jun- 21 | Dec- 21 | Jun- 22 | Dec- 22 | Jun- 23 | Dec- 23 | Jun- 24 | Dec- 24 |
|---------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Dekabank Deutsche | X | x | x | x | x | x | x | x | x | x | x | x | x | x | X | x | x | x | x | x | x |
| Girozentrale | | | | | | | | | | | | | | | | | | | | | |
| Deutsche Bank | Х | Х | Х | X | Х | Х | Х | Х | Х | Х | Х | Х | Х | Х | X | Х | Х | Х | Х | Х | Х |
| Deutsche Postbank | X | X | X | X | X | X | X | X | | | | | | | | | | | | | <u> </u> |
| Belfius Bank (formerly Dexia) | × | X | X | X | Х | X | X | X | X | Х | Х | Х | X | X | X | X | X | Х | X | Х | X |
| Banque Internationale | | | | | x | x | | x | | | x | | | | | | | | | | |
| Luxembourg (formerly Dexia BIL) | | | | | | | | | | | | | | | | | | | | | <u> </u> |
| Dexia Kommunal Bank | | | | | | | | | | | | | | | | | | | | | |
| Deutschland | | | | | | | | | | | | | | | | | | | | | <u> </u> |
| DNB Bank ASA | | | X | X | Х | X | X | Х | X | Х | Х | Х | X | X | X | X | X | Х | X | Х | Х |
| DZ Bank | X | X | X | X | X | X | Х | X | X | Х | Х | Х | X | X | X | Х | X | Х | Х | Х | Х |
| EFG Eurobank Ergasias | Х | | Х | X | Х | Х | Х | Х | Х | Х | Х | Х | Х | Х | Х | Х | Х | Х | Х | Х | Х |
| Erste Bank der | x | x | x | x | x | x | x | x | x | x | x | х | x | x | × | x | x | x | x | x | x |
| Oesterreichischen Sparkassen | | | | | | | | | | | | | | | | | | | | | |
| Euroclear Bank | × | Х | Х | Х | Х | Х | Х | Х | Х | | | Х | х | Х | Х | Х | Х | Х | Х | Х | Х |
| European Investment Bank | | | | | | | | | | | | | Х | Х | Х | Х | Х | Х | Х | Х | Х |
| Hypothekenbank Frankfurt | | | | | | | | | | | | | | | | | | | | | |
| International (formerly | | | | | | | | | | | | | | | | | | | | | |
| Eurohypo Europäische | | | | | | | | | | | | | | | | | | | | | |
| Hypothekenbank) | | | | | | | | | | | | | | | | | | | | | <u> </u> |
| Fortis Bank | Х | Х | Х | X | Х | Х | Х | Х | Х | Х | Х | Х | Х | Х | X | Х | Х | Х | Х | Х | Х |
| Goldman Sachs | Х | Х | Х | X | Х | Х | Х | Х | Х | Х | | | Х | Х | X | Х | Х | Х | Х | Х | Х |
| HSBC | | | | | | | | | | | | | | | | | | | | | |
| HSBC Athens | X | X | X | X | X | X | Х | X | X | Х | х | Х | X | X | X | Х | X | Х | X | Х | Х |
| HSBC France | ļ | | | | | | | | | | | | | | | | | | | | |
| HSH Nordbank | | | х | | | | | | | | | | | | | | | | | | |
| Unicredit Bank Germany | | | | | | | | | | | | | | | | | | | | | |
| (Bayerische Hypo-und- | × | х | x | X | X | x | x | X | x | х | х | Х | x | x | X | x | X | х | x | х | x |
| Vereinsbank) | | | | | | | | | | | | | | | | | | | | | |
| ICBC Standard Bank | | | х | X | Х | | | | | | | | | | | | | | | | |
| ING Bank | х | х | х | X | Х | | | | | | | | | | | | | | | | |
| Intesa SanPaolo | х | х | x | X | х | х | х | х | х | х | х | Х | х | х | X | х | x | х | х | х | х |
| Jefferies International | × | х | X | х | х | X | x | X | X | х | х | Х | x | x | X | x | X | х | x | х | х |
| JP Morgan | × | х | X | х | х | X | х | х | X | х | х | Х | x | X | х | X | X | х | X | х | х |
| KBC | × | х | X | х | х | X | х | х | X | х | х | Х | х | X | X | X | X | х | X | х | х |
| KfW | X | х | X | X | х | x | х | х | X | х | х | х | х | x | X | х | X | х | х | х | х |
| Kingdom of Belgium Federal | | | | | | | | | | | | | | | | | | | | | |
| Public Service Debt Agency | X | X | X | X | X | X | X | X | X | | | Х | | | | | | | | | |
| Landesbank Baden- | x | x | x | | | x | x | x | x | x | x | х | x | x | x | x | x | x | x | | x |
| Württemberg, Stuttgart | | | | X | | | | | | | | ~ | | | | | | | | X | |
| Landesbank Hessen- | | | | | | | | | | | | | | | | | | | | | |
| Thüringen -Girozentrale | X | х | x | X | X | | х | | | | | | | | | | | | | | |
| (Helaba) | | | | | | | | | | | | | | | | | | | | | |
| Lloyds Bank Commercial | | | | | | | | | x | x | x | х | × | x | x | x | x | x | x | x | x |
| Banking | | | | | | | | | Â | | Â | | | | | | | | | | |
| Lloyds Bank Plc | | | | | | х | х | х | х | х | х | Х | х | х | х | х | х | х | х | х | х |
| Macquarie Bank | х | х | х | х | | х | х | х | х | х | х | Х | х | х | | | х | | | х | |
| Bank of America Merrill Lynch | х | х | х | х | х | х | х | х | х | х | х | Х | х | х | х | х | х | х | х | х | х |
| Mitsubishi Securities | x | x | x | | x | x | x | x | × | x | x | х | x | × | × | x | × | × | x | × | x |
| International | ^ | | | | | | | | | ^ | ^ | ^ | | | | | | | | | ^ |
| Mizuho International | х | х | х | х | х | х | х | х | х | х | х | Х | х | х | х | х | х | х | х | х | х |
| Morgan Stanley | х | х | х | х | | х | х | х | х | х | х | х | х | х | х | х | х | х | х | х | х |
| National Australia Bank | | | х | | | | | | | | | | | | | | | | | | |
| National Bank of Greece | | | | х | х | | | | | | | | | | | | | | | | х |
| | 1 | 1 | 1 | 1 | 1 | i | i | 1 | i | 1 | i | | i – | i | 1 | 1 | i | i | 1 | i | <u> </u> |

| List of respondents | Dec- 14 | Jun- 15 | Dec- 15 | Jun- 16 | Dec- 16 | Jun- 17 | Dec- 17 | Jun- 18 | Dec- 18 | Jun- 19 | Dec- 19 | Jun- 20 | Dec- 20 | Jun- 21 | Dec- 21 | Jun- 22 | Dec- 22 | Jun- 23 | Dec- 23 | Jun- 24 | Dec- 24 |
|--|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Nomura International | × | X | X | × | × | × | × | × | × | × | × | × | × | × | × | × | × | × | × | × | × |
| Norddeutsche Landesbank Girozentrale | x | x | x | x | x | x | x | x | x | x | x | x | x | | | | | | | | |
| Nordea Markets | X | х | | х | х | х | х | х | х | х | х | х | х | х | х | х | х | х | х | х | х |
| Norinchukin Bank | X | х | х | х | х | х | х | х | х | х | х | х | х | х | х | х | х | х | х | х | х |
| Nova Ljubljanska Banka d.d. | X | | х | х | х | х | х | | х | х | х | х | х | х | х | х | X | | | | |
| Nykredit Bank A/S | | | | | | | | | | | х | х | х | х | х | х | X | х | х | х | х |
| Piraeus Bank | | | х | х | х | | х | | | | | | | | | | | | | | |
| Post Italiane | | | | | | | | | | | | | | | | | | х | х | х | х |
| Rabobank | x | х | х | х | х | х | х | х | х | х | х | х | х | х | х | х | X | х | х | х | х |
| Royal Bank of Canada | X | х | х | х | х | х | х | х | х | х | х | х | х | х | х | х | X | х | х | х | х |
| NatWest Markets (formerly Royal Bank of Scotland) | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x |
| RBI | | | | | | | х | | | | | | | | | | | | | | |
| Société Générale | x | х | х | х | х | х | х | х | х | х | х | х | х | х | х | х | X | х | х | х | х |
| Standard Chartered | | | | | | | | | | | х | х | х | х | х | х | х | х | х | х | х |
| Swedbank | | | | | | | | | | | | | | | | | | | | | х |
| Toronto Dominion Bank | X | х | х | х | х | х | х | х | х | | х | х | х | х | х | х | х | х | х | х | х |
| UBS | x | x | x | × | × | × | x | x | × | × | x | × | x | × | × | x | × | x | × | × | x |
| UniCredit Bank AG Milano Branch | | x | x | x | x | x | | x | | | x | x | x | x | x | x | x | x | | | |
| Unicredit Bank Spa | | | | | | | х | | х | х | х | х | х | х | х | х | x | х | х | х | х |
| Westdeutsche Landesbank Girozentrale | | | | | | | | | | | | | | | | | | | | | |
| | 64 | 64 | 70 | 66 | 65 | 64 | 64 | 62 | 59 | 56 | 60 | 61 | 60 | 59 | 56 | 56 | 61 | 62 | 60 | 61 | 61 |

Appendix C: Summary Of Survey Results

| | Jun-22 | Dec-22 | Jun-23 | Dec-23 | Jun-24 | Dec-24 |
|--|--------|--------|--------|--------|--------|--------|
| Q1 What are the total gross values of cash due to be repaid by you and repaid to you on repo transactions maturing after survey date? (figures in EUR billions) | 9,492 | 9,680 | 10,374 | 10,795 | 10,900 | 11,114 |
| Of the amounts given in response to question (1) above: | | | | | | |
| 1.1 How much was transacted: | | | | | | |
| direct with counterparties | | | | | | |
| • in the same country as you | 16.3% | 15.1% | 13.8% | 12.9% | 12.8% | 14.2% |
| cross-border in (other) eurozone countries | 12.5% | 12.8% | 11.9% | 11.6% | 12.1% | 13.1% |
| cross-border in non-eurozone countries | 35.7% | 35.6% | 32.0% | 34.5% | 34.8% | 34.4% |
| through voice-brokers | | | | | | |
| • in the same country as you | 2.9% | 3.3% | 4.0% | 4.6% | 6.2% | 5.6% |
| cross-border in (other) eurozone countries | 3.5% | 3.8% | 4.3% | 4.1% | 3.6% | 3.3% |
| • cross-border in non-eurozone countries | 1.7% | 1.9% | 1.9% | 2.0% | 2.2% | 3.4% |
| on ATSs with counterparties | | | | | | |
| • in the same country as you | 3.6% | 3.6% | 3.9% | 4.6% | 4.2% | 3.7% |
| cross-border in (other) eurozone countries | 2.7% | 2.9% | 3.3% | 3.2% | 3.1% | 2.4% |
| cross border-border in non-eurozone countries | 3.7% | 2.9% | 5.1% | 4.7% | 2.4% | 3.4% |
| anonymously across a GC financing system | 0.8% | 0.8% | 1.5% | 1.7% | 2.7% | 1.5% |
| anonymously across a central clearing counterparty but not GC financing | 16.6% | 17.3% | 18.3% | 16.0% | 15.9% | 15.1% |
| total through a central clearing counterparty | 27.0% | 23.8% | 25.7% | 23.4% | 22.0% | 20.5% |
| • transacted across any electronic system | 24.4% | 23.2% | 19.6% | 29.1% | 29.5% | 23.2% |
| 1.2 How much of the cash is denominated in: | | | | | | |
| • EUR | 54.7% | 56.4% | 58.8% | 54.4% | 53.9% | 53.1% |
| • GBP | 15.6% | 14.8% | 12.1% | 12.8% | 13.6% | 13.2% |
| • USD | 20.3% | 19.4% | 20.8% | 22.2% | 23.3% | 24.8% |

| | Jun-22 | Dec-22 | Jun-23 | Dec-23 | Jun-24 | Dec-24 |
|---|--------|--------|--------|--------|--------|--------|
| • SEK, DKK | 1.3% | 1.2% | 1.1% | 1.2% | 1.0% | 1.2% |
| • JPY | 5.7% | 5.6% | 5.1% | 7.4% | 5.4% | 4.8% |
| • CHF | 0.0% | 0.2% | 0.2% | 0.2% | 0.3% | 0.6% |
| other Asian and Pacific currencies | 1.1% | 1.3% | 0.7% | 0.8% | 1.1% | 0.9% |
| • other currencies | 1.4% | 1.1% | 1.2% | 1.0% | 1.3% | 1.5% |
| 1.3 How much is cross-currency? | 1.8% | 2.1% | 1.6% | 1.6% | 1.7% | 1.6% |
| 1.4 How much is: | | | | | | |
| • classic repo | 93.8% | 94.0% | 93.4% | 92.6% | 95.8% | 96.5% |
| documented sell/buy-backs | 5.7% | 5.9% | 6.5% | 7.3% | 4.1% | 3.5% |
| undocumented sell/buy-backs | 0.4% | 0.1% | 0.1% | 0.0% | 0.0% | 0.0% |
| 1.5 How much is: | | | | | | |
| • fixed rate | 88.0% | 87.1% | 85.1% | 80.8% | 80.3% | 84.8% |
| floating rate | 12.0% | 12.9% | 14.9% | 19.2% | 19.7% | 15.2% |
| • open | | | | | | |
| 1.6 How much fixed and floating rate repo is (1.6.1) for value before (survey date) and has a remaining term to maturity of: | | | | | | |
| • 1 day | 17.3% | 17.8% | 18.5% | 17.9% | 26.1% | 24.5% |
| • 2 - 7days | 22.8% | 19.7% | 24.7% | 24.9% | 25.6% | 22.1% |
| more than 7 days but no more than 1 month | 14.8% | 10.8% | 12.0% | 13.4% | 18.5% | 16.0% |
| more than 1 month but no more than 3 months | 9.5% | 11.9% | 7.0% | 11.3% | 7.5% | 12.2% |
| more than 3 months but no more than 6 months | 7.4% | 7.1% | 7.3% | 7.9% | 3.7% | 4.2% |
| • more than 6 months | 2.4% | 2.2% | 2.5% | 2.5% | 2.8% | 2.6% |
| • more than 12 months | 2.2% | 2.5% | 2.5% | 2.6% | 3.0% | 3.1% |
| forward-forward repos | 1.3% | 20.2% | 18.3% | 13.1% | 6.5% | 9.3% |
| • open | 8.2% | 7.8% | 7.1% | 6.3% | 6.2% | 6.1% |
| 1.7 How much is tri-party repo: | 75.9% | 75.7% | 72.7% | 76.3% | 79.4% | 81.2% |
| for fixed terms to maturity | 13.3% | 12.6% | 12.5% | 5.1% | 5.4% | 5.3% |
| • on an open basis | 10.8% | 11.7% | 14.8% | 18.7% | 15.2% | 13.5% |
| GCF | 9.0% | 6.5% | 8.0% | 8.8% | 9.8% | 10.5% |
| 1.8 How much is against collateral issued in: | | | | | | |
| Austria | | | | | | |
| by the central government | 1.0% | 0.8% | 0.8% | 0.8% | 0.8% | 0.9% |
| • by other issuers | 0.0% | 0.0% | 0.0% | 0.1% | 0.1% | 0.1% |

| | Jun-22 | Dec-22 | Jun-23 | Dec-23 | Jun-24 | Dec-24 |
|-----------------------------|--------|--------|--------|--------|--------|--------|
| Belgium | | | | | | |
| • by the central government | 2.6% | 2.6% | 2.9% | 2.2% | 2.3% | 2.1% |
| • by other issuers | 0.5% | 0.5% | 0.6% | 0.6% | 0.9% | 0.9% |
| Denmark | | | | | | |
| • by the central government | 0.3% | 0.2% | 0.2% | 0.1% | 0.1% | 0.1% |
| • by other issuers | 0.6% | 0.7% | 0.8% | 0.9% | 0.7% | 0.8% |
| Finland | | | | | | |
| • by the central government | 0.4% | 0.5% | 0.5% | 0.4% | 0.4% | 0.4% |
| • by other issuers | 0.0% | 0.0% | 0.0% | 0.0% | 0.1% | 0.0% |
| France | | | | | | |
| • by the central government | 12.8% | 12.5% | 13.8% | 11.5% | 10.4% | 10.7% |
| • by other issuers | 0.6% | 0.6% | 0.7% | 0.8% | 0.7% | 0.7% |
| Germany | | | | | | |
| • by the central government | 14.5% | 15.8% | 13.4% | 13.2% | 10.4% | 10.6% |
| pfandbrief | 0.5% | 0.6% | 0.0% | 0.1% | 1.6% | 0.1% |
| • by other issuers | 0.6% | 0.8% | 1.1% | 1.3% | 1.3% | 1.6% |
| Greece | | | | | | |
| • by the central government | 0.1% | 0.1% | 0.1% | 0.1% | 0.1% | 0.1% |
| • by other issuers | 0.0% | 0.0% | 0.1% | 0.1% | 0.1% | 0.1% |
| Ireland | | | | | | |
| • by the central government | 0.3% | 0.3% | 0.3% | 0.3% | 0.2% | 0.2% |
| • by other issuers | 0.3% | 0.3% | 0.3% | 0.3% | 0.2% | 0.2% |
| Italy | | | | | | |
| • by the central government | 11.6% | 12.0% | 13.2% | 12.3% | 12.5% | 13.0% |
| • by other issuers | 0.4% | 0.2% | 0.5% | 0.7% | 0.8% | 1.2% |
| Luxembourg | | | | | | |
| • by the central government | 0.0% | 0.1% | 0.1% | 0.0% | 0.0% | 0.0% |
| • by other issuers | 0.3% | 0.3% | 0.2% | 0.3% | 0.2% | 0.2% |
| Netherlands | | | | | | |
| • by the central government | 1.2% | 1.0% | 1.3% | 1.2% | 1.3% | 1.1% |
| • by other issuers | 0.2% | 0.2% | 0.2% | 0.3% | 0.3% | 0.3% |
| Portugal | | | | | | |
| • by the central government | 0.5% | 0.4% | 0.4% | 0.4% | 0.3% | 0.3% |
| • by other issuers | 0.0% | 0.1% | 0.1% | 0.1% | 0.2% | 0.1% |
| Spain | | | | | | |
| • by the central government | 4.8% | 4.8% | 5.6% | 4.6% | 4.8% | 3.8% |
| • by other issuers | 0.3% | 0.4% | 0.6% | 0.6% | 0.6% | 0.9% |

| | Jun-22 | Dec-22 | Jun-23 | Dec-23 | Jun-24 | Dec-24 |
|---|--------|--------|--------|--------|--------|--------|
| Sweden | | | | | | |
| by the central government | 0.4% | 0.3% | 0.3% | 0.3% | 0.2% | 0.2% |
| • by other issuers | 0.3% | 0.2% | 0.3% | 0.3% | 0.3% | 0.5% |
| UK | | | | | | |
| • by the central government | 13.9% | 12.9% | 11.4% | 11.2% | 11.8% | 11.9% |
| • by other issuers | 1.3% | 1.4% | 1.5% | 1.4% | 1.0% | 1.0% |
| US Treasury | 9.4% | 8.4% | 8.0% | 10.1% | 15.4% | 15.7% |
| US other issuers | 2.2% | 2.2% | 2.2% | 2.5% | 3.5% | 3.7% |
| US but settled across EOC/CS | | | | | | |
| other countries | | | | | | |
| Bulgaria | | | | | | |
| • by the central government | | | | | | |
| • by other issuers | | | | | | |
| Cyprus | | | | | | |
| • by the central government | | | | | | |
| • by other issuers | | | | | | |
| Czech Republic | | | | | | |
| • by the central government | 0.1% | 0.1% | 0.1% | 0.1% | 0.2% | 0.1% |
| • by other issuers | 0.1% | 0.0% | 0.0% | 0.1% | 0.1% | 0.0% |
| Estonia | | | | | | |
| • by the central government | | | | | | |
| • by other issuers | | | | | | |
| Hungary | | | | | | |
| • by the central government | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| • by other issuers | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| Latvia | | | | | | |
| • by the central government | | | | | | |
| • by other issuers | | | | | | |
| Lithuania | | | | | | |
| • by the central government | | | | | | |
| • by other issuers | | | | | | |
| Malta | | | | | | |
| • by the central government | | | | | | |
| • by other issuers | | | | | | |
| Poland | | | | | | |
| • by the central government | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| • by other issuers | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |

| | Jun-22 | Dec-22 | Jun-23 | Dec-23 | Jun-24 | Dec-24 |
|---|--------|--------|--------|--------|--------|--------|
| Romania | | | | | | |
| • by the central government | | | | | | |
| • by other issuers | | | | | | |
| Slovak Republic | | | | | | |
| • by the central government | | | | | | |
| • by other issuers | | | | | | |
| Slovenia | | | | | | |
| • by the central government | | | | | | |
| • by other issuers | | | | | | |
| Other EU members by central government | 0.1% | 0.0% | 0.0% | 0.1% | 0.1% | 0.1% |
| Other EU members by other issuers | 0.0% | 0.0% | 0.0% | 0.1% | 0.3% | 0.1% |
| by official international financial institutions | 0.5% | 0.5% | 0.6% | 0.6% | 0.5% | 0.5% |
| Japan | | | | | | |
| Japanese government | 4.0% | 3.9% | 3.8% | 5.7% | 4.8% | 4.2% |
| Other Japanese issuers | 1.3% | 1.3% | 1.4% | 1.5% | 0.1% | 0.2% |
| Other Asian & Pacific OECD countries in the form of fixed income securities, except eurobonds | 0.2% | 0.8% | 0.3% | 0.4% | 0.7% | 0.8% |
| Other OECD countries in the form of fixed income securities, except eurobonds | 6.6% | 6.2% | 6.1% | 6.2% | 2.3% | 2.8% |
| non-OECD EMEA | 0.5% | 0.5% | 0.3% | 0.4% | 0.3% | 0.3% |
| non-OECD Asian & Pacific | 0.3% | 0.3% | 0.3% | 0.3% | 0.3% | 0.3% |
| non-OECD Latin America | 0.7% | 0.7% | 0.9% | 0.9% | 1.0% | 1.2% |
| eurobonds issued by European entities | 0.1% | 0.1% | 0.1% | 0.1% | 0.1% | 0.3% |
| eurobonds issued by US entities | 0.4% | 0.4% | 0.4% | 0.5% | 0.3% | 0.3% |
| eurobonds issued by Asian & Pacific entities | 0.4% | 0.4% | 0.6% | 0.4% | 0.6% | 0.8% |
| eurobonds issued by other entities | 0.5% | 0.3% | 0.3% | 0.2% | 0.2% | 0.2% |
| equity | 0.0% | 0.5% | 0.6% | 0.8% | 0.5% | 0.5% |
| collateral of unknown origin or type | 1.5% | 1.6% | 1.9% | 2.1% | 3.0% | 2.9% |
| collateral in tri-party which cannot be attributed to a country or issuer | 0.1% | 0.2% | 0.2% | 0.3% | 0.4% | 0.4% |
| EU issues | 0.1% | 0.2% | 0.2% | 0.3% | 0.4% | 0.4% |
| total gross values of repo & reverse repo with APAC | 4.7% | 6.8% | 4.7% | 5.4% | 4.2% | 3.6% |

| | Jun-22 | Dec-22 | Jun-23 | Dec-23 | Jun-24 | Dec-24 |
|---|--------|--------|--------|--------|--------|--------|
| Q2 What is the total value of securities loaned and borrowed by your repo desk: to/from counterparties | | | | | | |
| in the same country as you | | | | | | |
| • in fixed income | 25.8% | 24.8% | 17.7% | 19.6% | 29.9% | 14.5% |
| • in equity | 0.1% | 0.0% | 0.1% | 0.1% | 0.1% | 0.1% |
| cross-border in (other) eurozone countries | | | | | | |
| • in fixed income | 30.7% | 25.1% | 35.6% | 35.5% | 32.2% | 26.0% |
| • in equity | 0.3% | 0.2% | 0.3% | 0.5% | 1.8% | 0.2% |
| • cross-border in non-eurozone countries | | | | | | |
| • in fixed income | 42.5% | 49.4% | 45.8% | 43.3% | 33.5% | 58.5% |
| • in equity | 0.6% | 0.4% | 0.5% | 1.0% | 2.5% | 0.8% |
| for which the term to maturity is | | | | | | |
| fixed | 68.0% | 70.6% | 73.7% | 58.6% | 62.3% | 72.0% |
| open | 32.0% | 29.4% | 26.3% | 41.4% | 37.7% | 28.0% |
| Number of GMRAs | 92.0% | 82.9% | 86.9% | 88.1% | 87.9% | 85.9% |

Appendix D: SFTR public data on the EU repo market in 2024

Executive summary

- Growth in the value of <u>new</u> repos in the EU market accelerated to +17% over 2024 to reach **EUR 2,837 billion** per day, but growth in the <u>number</u> of trades slowed, to average some **96,900** per day.
- The average value of repos <u>outstanding</u> at end-week recovered over 2024, to grow by +12% to EUR 13,005 million. However, the average <u>number</u> of outstanding trades shrank by -1% over 2024 to an average of almost 445,500.
- The market recovered quickly after the 2023 end-year and peaked in Q3, but then unwound rapidly over Q4, even before the seasonal end-year collapse.
- The downtrend in the share of **CCP-clearing** since 2023 appeared to have levelled out over H2 2024. The average term of CCP-cleared repo lengthened.
- OTC trading overtook EEA Trading Venues over H2 2024. Non-EEA Trading Venues notable for their very large average deal size also continued to take market share, but from a much lower base.
- Trading with **counterparties outside the EEA** increased its dominance of the EU market.

Table 1: summary statistics for the EU repo market

| 2024 (EUR billion and share) | average daily turnover | average end-week balance |
|-------------------------------------|------------------------|--------------------------|
| all repo | 2,837 | 13,005 |
| number of repos | 96,917 | 445,459 |
| repurchase transactions | 96% | 94% |
| CCP-cleared repo | 1,453 (51%) | 5,604 (43%) |
| repo on EEA trading venue | 1,286 (45%) | 4,954 (38%) |
| repo on non-EEA trading venue | 288 (10%) | 1,154 (9%) |
| post-trade registration of OTC repo | 17 (1%) | 286 (2%) |
| OTC repo | 1,247 (44%) | 6,611 (51%) |
| EEA-EEA repos | 1,240 (44%) | 6,471 (50%) |
| EEA-nonEEA repos | 1,595 (56%) | 6,493 (50%) |

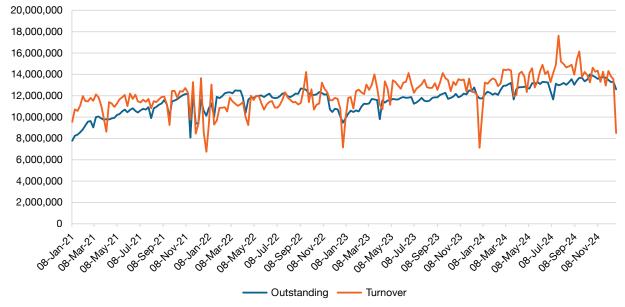
| 2023 (EUR billion and share) | average daily turnover | average end-week balance |
|-------------------------------------|------------------------|--------------------------|
| all repo | 2,432 | 11,577 |
| number of repos | 90,289 | 450,700 |
| repurchase transactions | 93% | 91% |
| CCP-cleared repo | 1,374 (57%) | 5,498 (48%) |
| repo on EEA trading venue | 1,252 (52%) | 4,802 (42%) |
| repo on non-EEA trading venue | 193 (8%) | 840 (7%) |
| post-trade registration of OTC repo | 40 (2%) | 317 (3%) |
| OTC repo | 947 (39%) | 5,618 (49%) |

| 2023 (EUR billion and share) | average daily turnover | average end-week balance |
|------------------------------|------------------------|--------------------------|
| EEA-EEA repos | 1,155 (48%) | 6,010 (52%) |
| EEA-nonEEA repos | 1,276 (53%) | 5,428 (47%) |

EU repo market in 2024

Overall size

Figure 1: value of weekly turnover vs end-week outstanding value 2021-2024



Source: DTCC, RegisTR, Unavista, author's calculations

Growth in the <u>value</u> of the <u>turnover</u> of new repos in the EU market accelerated to +16.7% over 2024 from +7.6% over 2023. The average daily turnover over the year was **EUR 2,837.4 billion**. However, growth in the <u>number</u> of new trades decelerated to +7.3% over 2024, down from +10.4% in 2023, to average **96,917** per day. Consequently, average deal size increased to EUR29.3 million from EUR 26.9 million (touching a record high of EUR 31.4 million over Q3 2024).

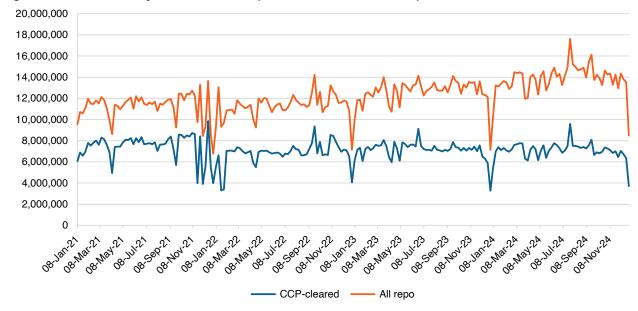
The market recovered quickly from the seasonal hiatus at the end of 2023. Turnover then grew strongly, if erratically, over H1 2024, before jumping in Q3 and spiking in the weeks ending 26 July and 20 September. But the market reversed direction in Q4 (whereas the UK market went on to peak in Q4), until it was hit by the usual end-year collapse. There was no evidence in the SFTR data of the EGB sell-off in early June (following a spate of elections results in the EU and heightened fiscal concerns) or of any reactions to the four ECB rate cuts. The usual seasonal troughs were apparent at Easter, the May Day holiday and end-year.

Growth in the <u>value</u> of repos <u>outstanding</u> at end-week rebounded to +12.3% over 2024 from -1.9% over 2023, to average **EUR 13,005.2 million**. However, the <u>number</u> of outstanding trades, which had grown by +2.5% over 2023, decreased over 2024 by -1.2%, to average **445,459**. As a result, average outstanding deal size increased to EUR 29.2 million from EUR 25.7 million over 2023.

The value of outstanding repos has tended not to reflect drops in average daily turnover, except at Easter. However, in 2024, outstandings dropped sharply in the week ending 12 July, seemingly in reaction to more modest falls in turnover in the first two weeks of July (but this could have been due to the maturing of early trades or termination of open repos). The spikes in turnover in July and October had no evident impact on outstandings, suggesting they were very short-term trades.

Buy/sell-backs dwindled to a record low of 3.8% over 2024, from 7.3% over 2023, having started to trend down in 2022 and dropping sharply in March 2024. Much of this decline will have reflected the shift into repurchase transactions in the Italian market (although this happened on MTS in 2018).

CCP-clearing





Growth in the <u>value</u> of the <u>turnover</u> in new CCP-cleared repos accelerated to +5.7% in 2024 from 0.7% in 2023, but once again lagged the market, so the average share of CCP-cleared repos fell to a new low of 51.2% over 2024 from 56.5% over 2023. In terms of weekly turnover, the downward trend seen since 2023 appeared to level out in H2 2024 (see Figure 3 below).

With a few exceptions, turnover in CCP-cleared repos closely tracked the whole market over 2024, the exceptions being when the market spiked (that is, CCP-clearing lagged the rest of the market).

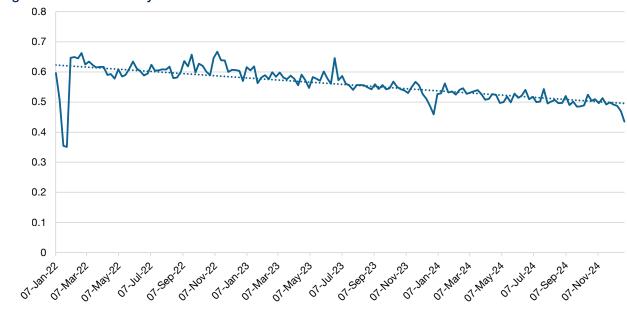
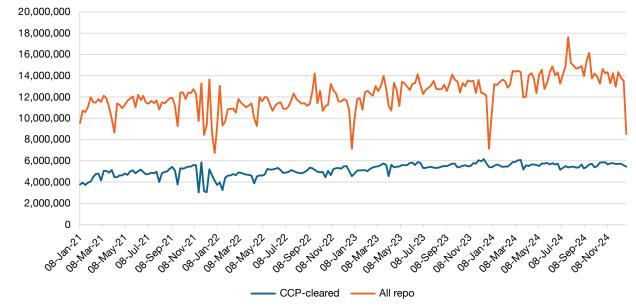


Figure 3: share of weekly turnover that is CCP-cleared 2022-2024

Source: DTCC, RegisTR, Unavista, author's calculations

Source: DTCC, RegisTR, Unavista, author's calculations

In contrast to turnover, the <u>value</u> of CCP-cleared repos <u>outstanding</u> at end-week grew by only +1.9% over 2024, down from +13.4% over 2023, and its share fell back to 43.1% from 47.5%. The implication is that the average duration of CCP-cleared repos lengthened over 2024.





Source: DTCC, RegisTR, Unavista, author's calculations

The <u>number</u> of new CCP-cleared repos grew by +5.6% over 2024, down from +7.1% over 2023. Their share of average daily turnover declined to 60.9% from 61.9%.

The <u>number</u> of CCP-cleared repos still outstanding at end-week increased by just +2.2%, compared with +8.6% in 2023, but their share nevertheless expanded to 40.0% from 38.7%, supporting the suggestion of longer duration.

The average deal size for new CCP-cleared trades was EUR 24.6 million compared with EUR 24.6 million over 2023. For outstanding trades, it was little changed at EUR 31.5 million. The averages for outstanding trades were EUR 31.4 million and EUR 31.5 million, respectively.

Execution venues

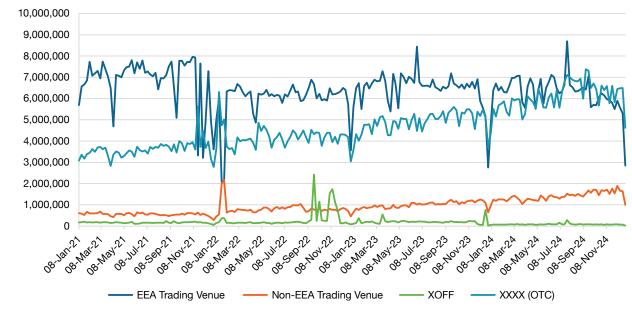


Figure 5: value of weekly turnover by execution venue 2022-2024

The <u>value</u> of <u>turnover</u> on **EEA Trading Venues** (MTFs and OTFs) grew by +2.7% over 2024, down from +4.9% over 2023, and their share fell back sharply to 45.3% from 51.5%, continuing the retreat that began in 2023. The share of the <u>number</u> of new trades on EEA Trading Venues fell to 56.8% from 58.4%, reflecting a deceleration in growth to +4.4% from +9.2%. The average deal size of new repos on EEA Trading Venues was little changed at EUR 23.4 million. The smaller share of EEA Trading Venues reflected the continued rapid expansion in OTC trading, which is now the dominant market segment (as it always been in the UK market).

The value of <u>outstanding</u> trades executed on EEA Trading Venues grew by only +3.2% over 2024, compared with +12.4% over 2023, and their share fell back to 38.1% from 41.5%. The <u>number</u> of these outstanding trades shrank (-0.7% compared with +12.9% over 2023), but there was little change in share. The average deal size of outstanding repos on EEA Trading Venues increased to EUR 28.6 million from EUR 27.6 million.

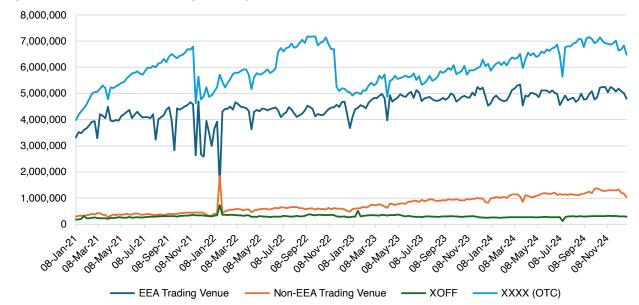


Figure 6: end-week outstanding value by execution venue 2022-2024

Source: DTCC, RegisTR, Unavista, author's calculations

The **OTC** market (SFTR code = XXXX) saw the <u>value</u> of <u>turnover</u> grow by +31.6% over 2024, up from +13.2% in 2023, and increased its share to 43.9% from 38.9%. The <u>number</u> of new trades expanded by +16.2%, compared to 9.4% over 2023, which meant that the average new OTC deal size increased to EUR 35.5 million from EUR 31.3 million.

The <u>outstanding value</u> of OTC trades grew by +17.7% over 2024, compared to a contraction of -8.2% in 2023, and their share increased to 50.8% from 48.5%. As the <u>number</u> of outstanding OTC trades fell by -4.2%, compared with +0.1% over 2023, average outstanding deal size increased to EUR 29.9 million from EUR 24.4 million.

The <u>value</u> of average daily <u>turnover</u> of **non-EEA Trading Venues** extended its upward trend, growing by +48.9% over 2024, compared with +16.9% over 2023, and they increased their share to 10.1% from 7.9%. The number of these trades grew by +13.3%, compared with +14.3% in 2023, so average new deal size jumped to EUR 58.3 million from EUR 44.4 million.

The <u>outstanding value</u> of repos on non-EEA Trading Venues grew by +37.4%, similar to the growth rate of +39.5% over 2023, to increase share to 8.9% from 7.3%. The <u>number</u> of these trades grew by +17.4%, compared with -20.8% in 2023, which meant that the average deal size of outstanding repos increased to EUR 39.9 million from EUR 34.1 million.

The share of new repos that were traded OTC and then registered on a Trading Venue (SFTR code = **XOFF**) continued to contract, reaching 0.6% from 1.6%. Their share of outstanding repos was 2.2%, down from 2.7% in 2023.

Locations of counterparties

The <u>value</u> of <u>turnover</u> reported by EEA entities with third-country counterparties continued to outpace intra-EEA trades. In the 2024, the value of these new "third-country" (extra-EEA) repos grew by +25.0%, compared with +11.2% over 2023, to reach a share of 56.2%, compared with 52.5% over the previous year. Intra-EEA trades grew by +7.4%, compared with +3.8% in 2023, but their share contracted to 43.7% from 47.5%. Growth in the <u>number</u> of new third-country trades was +8.3%, compared with +12.5% over 2023. Their share rose to 48.2% from 47.8%. Average deal size grew to EUR 34.1 million from EUR29.6 million, but was little changed at EUR 24.5 million for intra-EEA trades.

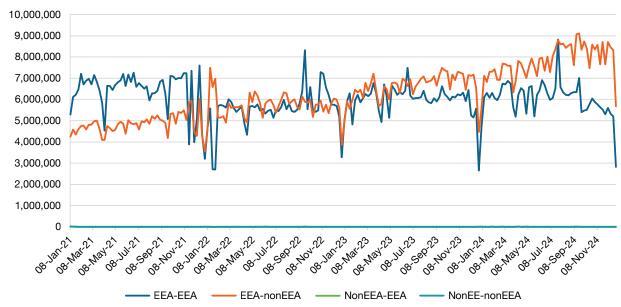
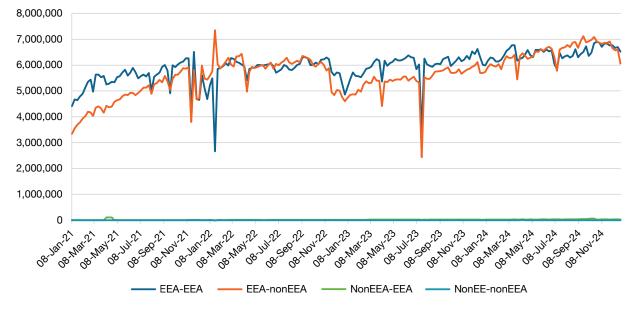


Figure 7: value of weekly turnover by reporting vs other counterparty locations 2022-2024

Source: DTCC, RegisTR, Unavista, author's calculations

In terms of <u>outstanding</u> value, third-country repos reversed the decline of -8.2% over 2023, to grow by +19.6% over 2024, taking their share up to 49.9% from 46.9%. However, the <u>number</u> of outstanding third-country repos fell by -5.8% after little growth in 2023, and their share dropped to 47.2% from 49.5%. Given that turnover in third-country repo is higher than in intra-EEA repo, but the values outstanding at end-week are similar, it seems that third-country repos are shorter-term. It is noticeable that the collapse in the turnover in new intra-EEA repos in H2 was not reflected in their outstanding value, implying that the average tenor of intra-EEA repos lengthened significantly in H2, perhaps reflecting term trades over end-year.





Source: DTCC, RegisTR, Unavista, author's calculations

Appendix E: SFTR public data on the UK repo market in 2024

Executive summary

- The headline news in 2024 was an exceptional spike of almost EUR 4.2 trillion in reported turnover but not in outstanding amount in the week ending 5 July, which was the week of the UK General Election. The absence of an impact on outstandings implies that the spike was in very short-term repos. These transactions were also reported as being between UK and non-UK reporting parties, and traded OTC before being registered on a Trading Venue, but not as might be expected for the purpose of indirect post-trade submission to a CCP. This spike in reported turnover is clearly a reporting error.
- The average daily <u>turnover</u> of repo in the UK market grew by almost +15% over 2024, to reach **GBP 1,934** million = **EUR 2,284 billion**. But trade count increased by less than +6% to over **70,200** per day.
- The average value of repos <u>outstanding</u> at end-week in 2024 grew by +8% to **GBP 8,553 million = EUR 10,306 million**, while the average number of trades outstanding at end-week fell by some -6% to almost **431,800**.
- The average daily turnover of **CCP-cleared repo** increased by almost +6%, but its share of total turnover fell back again, down to below 25% from almost 27%. However, the average outstanding value at end-week remained at about 18%. The <u>numbers</u> of new and outstanding CCP-cleared repos decreased.
- The data therefore implied larger average deal size, but shorter average term to maturity, for both bilaterallycleared and CCP-cleared repos.
- The share of average daily turnover taken by non-UK Trading Venues grew by over +25% to 32%, from under 29% in 2023, largely at the expense of repo traded OTC and registered on a Trading Venue post-trade (down to a share of less than 2% from almost 5%, despite the July spike). OTC trading increased by over +17% to exceed 56% from some 55%. The outstanding value of trades across non-UK venues grew by a similar amount to turnover, but of OTC only increased by some +7%.
- **Cross-border** trading captured a record share of 84% of average daily turnover (up +16% from almost 83% in 2023). The changes in the value of outstanding cross-border trades were similar.

| 2024 (EUR billion or share of value) | average daily turnover | average end-week balance |
|---------------------------------------|------------------------|--------------------------|
| all repo | 2,284 | 10,306 |
| number of repos | 70,215 | 431,758 |
| repurchase transactions share of repo | 98% | 96% |
| CCP-cleared repo | 567 (25%) | 1,841 (18%) |
| repo on UK trading venue | 231 (10%) | 906 (9%) |
| repo on non-UK trading venue | 730 (32%) | 3,206 (31%) |
| post-trade registration of OTC repo | 40 (2%) | 449 (4%) |
| OTC repo | 1,282 (56%) | 5,732 (56%) |
| UK-UK repos | 362 (16%) | 1,482 (14%) |
| UK-nonUK repos | 1,921 (83%) | 8,789 (85%) |

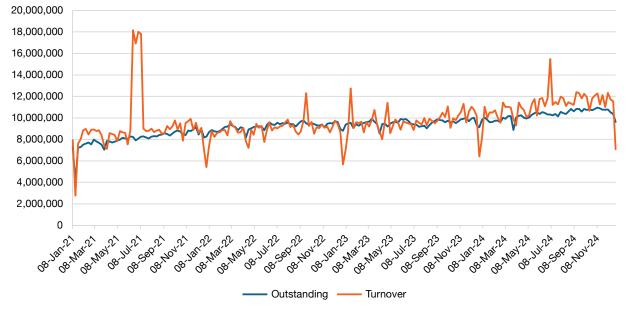
Table 1: summary statistics for the UK repo market

| 2023 (EUR billion or share of value) | average daily turnover | average end-week balance |
|--------------------------------------|------------------------|--------------------------|
| all repo | 1,988 | 9,543 |
| number of repos | 66,275 | 456,716 |
| repurchase transactions | 97% | 96% |
| CCP-cleared repo | 536 (27%) | 1,729 (18%) |
| repo on UK trading venue | 212 (11%) | 804 (8%) |
| repo on non-UK trading venue | 583 (29%) | 2,548 (27%) |
| post-trade registration of OTC repo | 98 (5%) | 829 (9%) |
| OTC repo | 1,095 (55%) | 5,349 (56%) |
| UK-UK repos | 334 (17%) | 1,349 (14%) |
| UK-nonUK repos | 1,640 (83%) | 7,971 (84%) |

UK repo market in 2024

Overall size

Figure 1: value of average weekly turnover vs average outstanding at end-week 2022-2024



Source: DTCC, Unavista, author's calculations

The <u>value</u> of average daily <u>turnover</u> in the UK market grew by +14.9% over 2024 to reach **GBP 1,934 million = EUR 2,284 billion**.¹⁵ This represented a sharp acceleration from growth of +7.4% over 2023. However, the <u>number</u> of new trades increased by only +5.9% to **70,215** trades per day, a significant deceleration from record growth of +16.2% over 2023 and implying an increase in average new deal size to EUR 32.5 million from EUR 30.0 million.

Most of the growth in turnover occurred during H1 (+10.5% over H2 2023). There were the usual seasonal lulls over end-year and at Easter (distinct from other troughs in activity, in that end-year and Easter drops significantly affect outstandings).

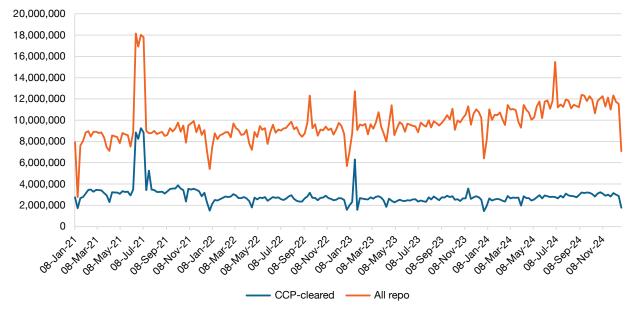
But the most dramatic development in 2024 was an exceptional spike of almost EUR 4.2 trillion in the value of new repos reported in the week ending 5 July, which was UK General Election week. The number of new trades that week jumped to 600,247, from 353,208 the previous week but fell back to 341,306 the next week.

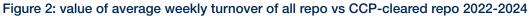
15 Average daily turnover rates have been recalculated for this report to exclude non-business days.

The average <u>value</u> of repos <u>outstanding</u> at end-week grew by +8.0% over 2024 to **GBP 8,522.7 million = EUR 10,305.6 million**. In contrast, the average <u>number</u> of such trades fell by -5.5% to **431,758**, compared to +10.4% over 2023. Consequently, average outstanding deal size increased to EUR 23.9 million from EUR 20.9 million.

The smaller average size of outstanding repo compared to new repo implies that longer trades tend to be smaller. And the faster rise in turnover relative to outstandings since Q4 2023, shown in Figure 1 above, implies a shortening of the average term to maturity in the UK repo market over 2024, especially in Q3.

CCP-clearing





The <u>value</u> of average daily <u>turnover</u> in CCP-cleared repo grew by +5.7% over 2024, but faster growth in the rest of the market meant that its share dropped to 24.8% from 27.0% over 2023. The share of CCP-cleared activity in 2024 dropped a notch from 2023, but its long-term decline subsequently slowed. It then recovered over H2, to reach 25.1% over that semester from 24.5% in H1 (see Figure 3 below). The change in the <u>number</u> of new CCP-cleared repos went into reverse in 2024, decreasing by -4.9% over 2024 from +14.1% over 2023. The share of total repos fell to 27.3% from 30.4%, implying larger average deal size.

Source: DTCC, Unavista, author's calculations

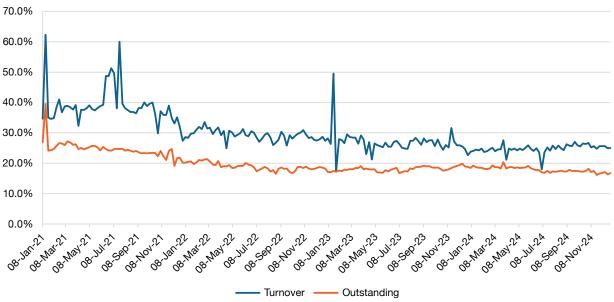


Figure 3: shares of value of weekly turnover and at end-week of all vs CCP-cleared repo 2021-2024

Source: DTCC, Unavista, author's calculations

The average <u>outstanding value</u> of CCP-cleared repos at end-week grew by +6.5% over 2024, having fallen by -1.0% over 2023, but its share fell to 17.9% from 18.1%. The average <u>number</u> of outstanding CCP-cleared repos decreased by -1.3% over 2024 from +11.8% over 2023, but the share of total repos rose to 12.2% from 11.7%. Thus, outstanding CCP-cleared repos also increased average deal size.

The slower decline in the number of outstanding CCP-cleared repos relative to new CCP-cleared repos implies a longer average term. CCP-cleared repo therefore got bigger and longer on average over 2024.

While the evolution of CCP-cleared repo is usually closely correlated with that of the UK market as a whole (see Figure 2), there was a significant divergence in the week ending 5 July 2025. While turnover for the whole market spiked by almost 40%, CCP-cleared activity did not.

Execution venue

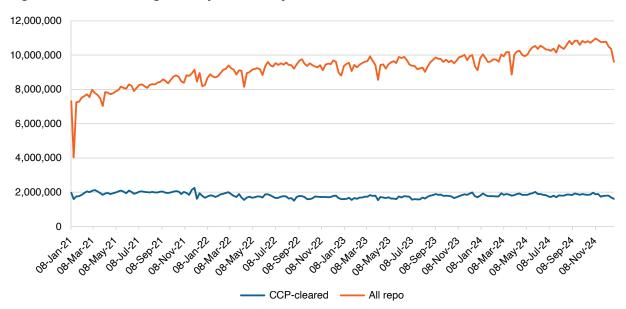


Figure 4: value of average weekly turnover by execution venue 2022-2024

Source: DTCC, Unavista, author's calculations

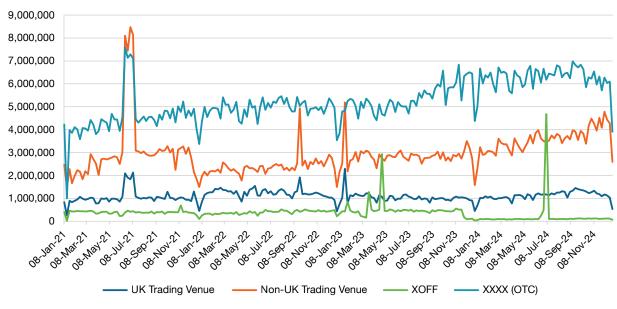
There were two developments of particular note in 2024 about execution venues serving the UK repo market: a surge in new repos on non-UK Trading Venues; and the dramatic spike, in UK election week, in new repos that were purportedly traded OTC and then registered on a Trading Venue (SFTR code = XOFF).

As regards <u>new</u> repos on **non-UK Trading Venues**, <u>value</u> rose by +25.3% over 2024, to capture a share of 32.0% of total new repos, compared with 29.3% in 2023. Moreover, growth accelerated in Q4, to capture 35.6% of new trades in that quarter. This growth was largely at the expense of **OTC repos registered on a Trading Venue post-trade**, which shrank by -58.8% over 2024 and saw their share fall to 1.8% from 4.9%, despite the spike in July. It is generally believed that the post-trade registration of such XOFF trades on Trading Venues is to register OTC repos with CCPs. But the July spike in XOFF trades was not reflected in CCP-cleared repo data at all.

Growth in new repo on **UK Trading Venues** was +9.2% over 2024, compared to -16.4% over 2023, but the share fell to 10.1% from 10.6% in 2023. However, the trend was upwards, with a good performance in the first three quarters, to reach a share of 10.4% of new repos in H2, up from 9.8% in H1.

New trades in the **OTC market** grew by +17.1% and their share of the total expanded to 56.1% from 55.1%. However, the trend here was downwards. By Q4 2024, the share of new OTC repos had dropped to 53.2% from a high of 59.3% in the last quarter of 2023.

In terms of end-week <u>outstanding values</u>, there is no evidence of the spike in OTC post-trade-registered repos. If the new trades do exist, this would mean they were all very short-term. But these XOFF repos lost share, shrinking by -45.8% to a share of 4.4% from 8.7% in 2023. The share of non-UK Trading Venues rose by +25.9% to 31.1% from 26.7%; that of UK Trading Venues increased by +12.6% to 8.8% from 8.4%; and that of OTC trading grew by +7.2% to 55.6% from 56.1%.





Source: DTCC, Unavista, author's calculations

The <u>number</u> of <u>new</u> trades in the week ending 5 July jumped to 264,972, from 16,374 the previous week, but fell back to just 4,115 the following week, implying the spike was in very short tenors. In contrast, the number of <u>outstanding</u> trades in the week ending 5 July was 44,960, which was only about 400 higher than in the preceding and succeeding weeks.

Location of counterparties

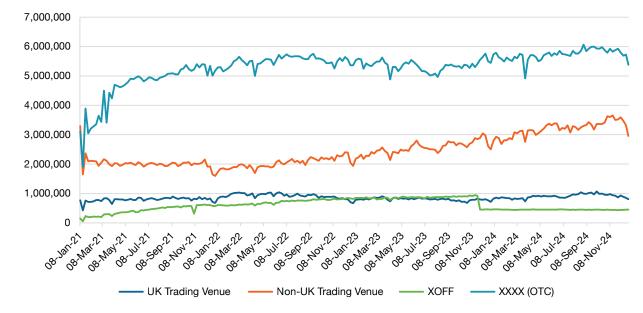


Figure 6: turnover per week by reporting parties' locations 2022-204

The average daily <u>value</u> of <u>new</u> **cross-border** trades reported by UK counterparties grew strongly again over 2024, by +17.1% to reach a new high of 84.1% from 82.5% in 2023.

New **domestic** activity grew by +8.4% but its share dropped to 15.9% from 16.8% in 2023.

The <u>number</u> of new cross-border repos grew by 6.5% to 81.9% from 81.5% in 2023. The number of domestic repos grew by +6.9% to reach 18.1% from 17.9%.

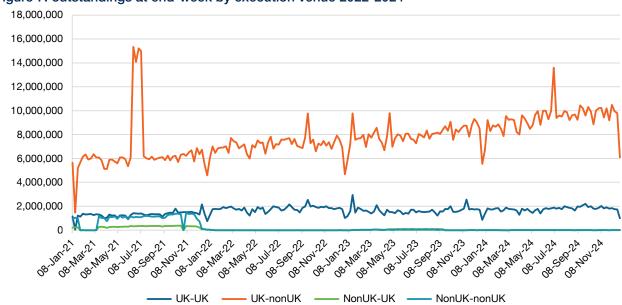


Figure 7: outstandings at end-week by execution venue 2022-2024

Source: DTCC, Unavista, author's calculations

Source: DTCC, Unavista, author's calculations

The <u>value</u> of cross-border repos reported by UK counterparties that were still <u>outstanding</u> at end-week increased by +9.1% over 2024 to 85.6% from 85.7% in 2023, but the number fell by -6.8% to 85.7% from 87.8%. In comparison, the outstanding value of domestic repos recovered to grow by +9.9%, compared to a fall of -19.6% over 2023, to reach 14.4% from 14.1%, while the <u>number</u> increased by +11.6% to 14.3% from 12.1%. Outstanding domestic repo therefore became relatively larger than cross-border trades.

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