ICMA
International Capital Market Association

International Capital Market Association
European Repo Market Survey

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Disclaimer

This report has been compiled by Richard Comotto, Senior Consultant to ICMA.

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Executive Summary

In June 2024, the European Repo and Collateral Council (ERCC) of the International Capital Market Association (ICMA) conducted the 47th 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 were still outstanding at close of business on June 12, 2024. 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 all or almost all electronic repo trading and tri-party repo collateral management in Europe.

Total repo business

The total value of the repo contracts outstanding on the books of the 61 entities who contributed to the latest survey reached a new record high of **EUR 11,114 billion,** compared with EUR 10,899 billion in the December 2023 survey (+3.0% survey-on-survey and +7.1% year-on-year). Growth was faster than in the previous survey but the trend is still one of deceleration. This is more apparent after adjusting for changes in the composition of the survey sample, which lowered growth rates to +1.7% since December and +4.9% year-on-year.

From 2012 to 2023, the survey sample ran a net reverse repo position with the rest of the repo market, reflecting the collateral scarcity and excess liquidity created by central bank asset purchases and other market intervention. In June 2023, there was a dramatic drop in the net reverse repo position. This followed the switch by central banks from quantitative easing (QE) to quantitative tightening (QT) and increased issuance of government securities – developments reducing the need to borrow securities. However, the impact of QT on repos against European government securities in the June 2023 survey appears to have been augmented by a shift of balance sheet capacity by many dealers from Europe to the US and Asia, which increased borrowing of US Treasuries and JGBs. In December 2023, the survey sample's net reverse repo position returned close to previous levels. In the latest survey, the net reverse repo position remained large but continued to recede.

Trading analysis

The ATS share of the survey contracted again, as voice-brokered and tri-party positions grew at a faster rate. Easier supplies of cash and collateral – as a result of QT and heavy bond issuance – may be reducing the demand for specific collateral, as well as the need for dealers to rebalance cash and collateral inventory, which tends to be managed across ATS. However, ATS activity continues to be stronger outside the survey sample.

Easier supplies of cash also explain the recent recovery in tri-party and other cash-driven repo. The recovery in tri-party repo accelerated in the first-half of 2024. However, the main driver of this growth was no longer GC financing repo.

In contrast to interdealer (D2D) trading across ATS, the growth in dealer-to-customer (D2C) business across automated repo trading systems remained robust, being driven by demand for cost and operational efficiency through automation, particularly by hedge funds.

Geographical analysis

The share of cross-border business into and out of the eurozone declined, possibly as a result of a reversal, at least in part, of the pivot by dealers from Europe to the US and Asia in the second-half of 2023.

The exceptional rise in the share of ATS business within the eurozone was sustained into 2024. This has been driven largely by GC financing.

In terms of trend, the decline in the shares of domestic and cross-border business within the eurozone may have started to level out; the uptrend in the share of cross-border business into and out of the eurozone continued; and the share of anonymous (CCP-cleared) positions moved sideways.

Clearing analysis

The reduction in the share of ATS – which provide most of the business cleared on CCPs – continued to have the effect of reducing the share of CCP-clearing but this decline was offset by sustained growth in GC financing. There was also a recovery in the central-clearing of sterling-denominated repo.

Cash currency analysis

The share of the US dollar continued to grow, reflecting swings in market expectations about interest rate cuts by the Federal Reserve but also high yields and record issuance of Treasuries. There was a contraction in the share of the Japanese yen. The sideways trend in the share of the euro, which has been in place since 2020, was maintained. The share of sterling recovered, after losing ground in 2022. This was probably on the back of current high yields, expectations of future rate cuts, the increased supply of new gilts and certainty about the result of the July general election. However, sterling repo positions remained below their 2021 peak.

Collateral analysis

The growth in the share of US Treasuries accelerated to reach a record level. The principal counterpart was again the contracting shares of French and German, as well as Japanese securities and other OECD issues. As a result, US Treasuries remained the largest collateral holding by the survey sample but, at the same time, there was a switch back to net lending of US Treasuries, as balance sheets were pivoted back to the European market from the US and Asia. UK gilts retained their share of the repo books of the survey sample.

While heavy government bond issuance and bullish expectations about bond yields generally fueled growth in European repo markets, French and German government securities were hit by political uncertainty around elections and their fiscal implications, while traditional safe assets suffered from the weight of new supply.

In tri-party repo, as reported by the principal agents, allocations of government securities bounced back, in contrast to holdings of the survey sample. Only convertible bonds could keep up. The value of covered bonds contracted, as the impact of TLTRO refinancing declined. European eurobonds remained the largest class of collateral security in tri-party repo followed by UK gilts, French bonds and bonds issued by the EU.

The balance of collateral positions in tri-party repo tilted further towards AA and A-rated securities and away from AAA-rated securities.

There was a general and significant moderation in weighted-average haircuts on tri-party collateral.

Contract analysis

Repos that were guaranteed or indemnified (including the various forms of “sponsored” repo) accounted for 4.7% of the outstanding positions of the survey sample. 66% were in euros and 24% in dollars. These are almost certainly underestimates.

Repo rate analysis

The growth in the share of floating-rate repo – which started in 2020 in response to interest rate hikes by central banks – continued in the first-half of 2024, notwithstanding a change in direction of monetary policy by many central banks.

Maturity analysis

Maturity transformation by the survey sample intensified in the first-half of 2024. A surge in the share of gross positions with one day remaining to maturity shifted the entire net repo position of the survey sample into the one-day residual maturity band. The shift towards the very short term was especially pronounced in electronically-traded positions. The weighted-average residual-term-to-maturity of outstanding repos on the books of the survey sample shortened significantly.

There was also a further contraction in forward positions, probably reflecting the reduced need, given the prevailing benign market conditions, for firms to anticipate market tightening on regulatory reporting dates or futures delivery dates.

Product analysis

The share of securities lending executed on repo desks recovered, confirming that its seasonality has reversed (increasing in June and falling back in December).

Concentration analysis

The largest participants in the survey increased their shares, largely at the expense of middle-ranking firms. However, smaller firms also gained ground.

Chapter 1: The Survey

On June 12, 2024, the European Repo and Collateral Council (ERCC) of the International Capital Market Association (ICMA) conducted the 47th 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 the market burgeoned and matured into an efficient component of the financial system, while coping with unprecedented 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, June 12, 2024. The survey therefore measures the stock, or outstanding balance, of transactions that have not matured or been terminated by the survey date. 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 participating entities 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 participants is reproduced in Appendix A.

As well as reports sent by participating entities, data have been separately contributed, since 2003, by the principal automatic 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 automated dealer-to-customer repo trading systems in Europe.[3] Members of the Wholesale Market Brokers' Association (WMBA) contributed data on voice-broking separately between 2002 and 2017. These sources of data cover all or most of the population of electronic trading and tri-party management platforms in Europe, against which the size, composition and changes in electronic trading and tri-party repos executed by the survey sample can be placed in context.

1.2 The response to the survey

The latest survey was completed by 61 entities belonging to 53 financial groups. There was one more participant than in December 2023, which was a bank rejoining the survey.

Of the 61 participants in the latest survey, 43 were headquartered across 14 European countries, including members of the EU (35), Norway (1), Switzerland (1) and the UK (6). The EU participants were headquartered across 11 of the 27 member states (there continued to be no participants in the survey from Finland and Sweden, and none from the former Accession States). 31 EU participants were headquartered across 10 of the 19 countries of the eurozone. Other survey participants were headquartered in Japan (5), North America (12) and Australia (1). 20 participants were branches or subsidiaries of foreign parents, most of which (16) continued to be located in the UK.

Many entities provided data for their entire European repo business. Others made separate returns for one or more (but not necessarily all) of their European offices. Participants were asked to report for both their UK and EU offices, where they have divided their European business post-Brexit. A list of the entities 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 close of business on **Wednesday, December 11, 2024.**

Any financial institution wishing to join the next survey can download copies of the questionnaire and accompanying Guidance Notes from ICMA's website. The latest forms are published at www.icmagroup.org/surveys/repo/participate.

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 and participants can request to make returns that are anonymised before the data are made available to the author. Only aggregated data are published and ICMA is not permitted to disclose data reported by individual participants.

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 is not reporting.
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 and Euroclear UKI (Crest).
3 Tradeweb has provided data back to 2020 and GLMX, who joined the survey in December 2023, from 2022.

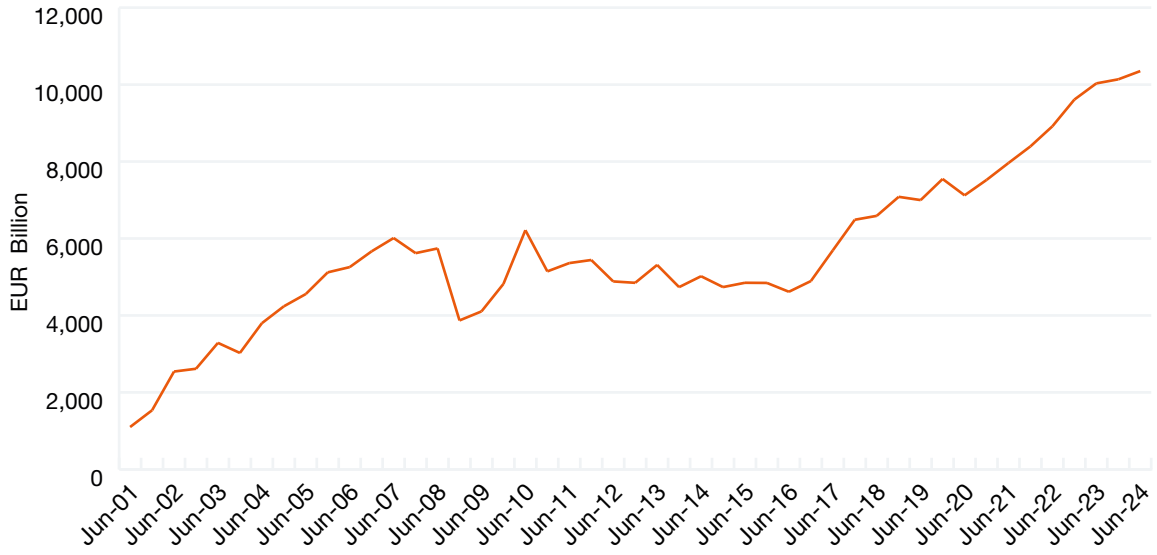
Chapter 2: Analysis of Survey Results

The aggregate results of the latest two surveys (December 2023 and June 2024) and of the surveys in each June in the three previous years (2021-2023) are set out in Appendix C. The full results of all previous surveys can be found at www.icmagroup.org.

Total repo business (Q1)

The total value, at close of business on June 12, 2024, of repos and reverse repos outstanding on the books of the 61 entities who participated in the latest survey reached **EUR 11,114.3 billion**, another all-time high. This means that the repo books of the survey sample grew by +3.0% since the previous survey (from EUR 10,899.8 billion) and +7.1% year-on-year (from EUR 10,794.4 billion). These latest growth rates compare with +1.0% and +5.1%, respectively, in the December 2023 survey. The headline numbers of the survey therefore suggest an uptick of activity in the first-half of 2024 but the trend rate of growth of the survey sample still appears to be decelerating (see Figure 2.1).

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. This is when central banks started to offer long-term liquidity to sustain the financial markets after the European sovereign debt crisis (see Table 2.1).

Table 2.1 – Total repo business

survey	total	repo	reverse repo
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%
2001 December	2,298	50.4%	49.6%
2001 June	1,863	49.6%	50.4%

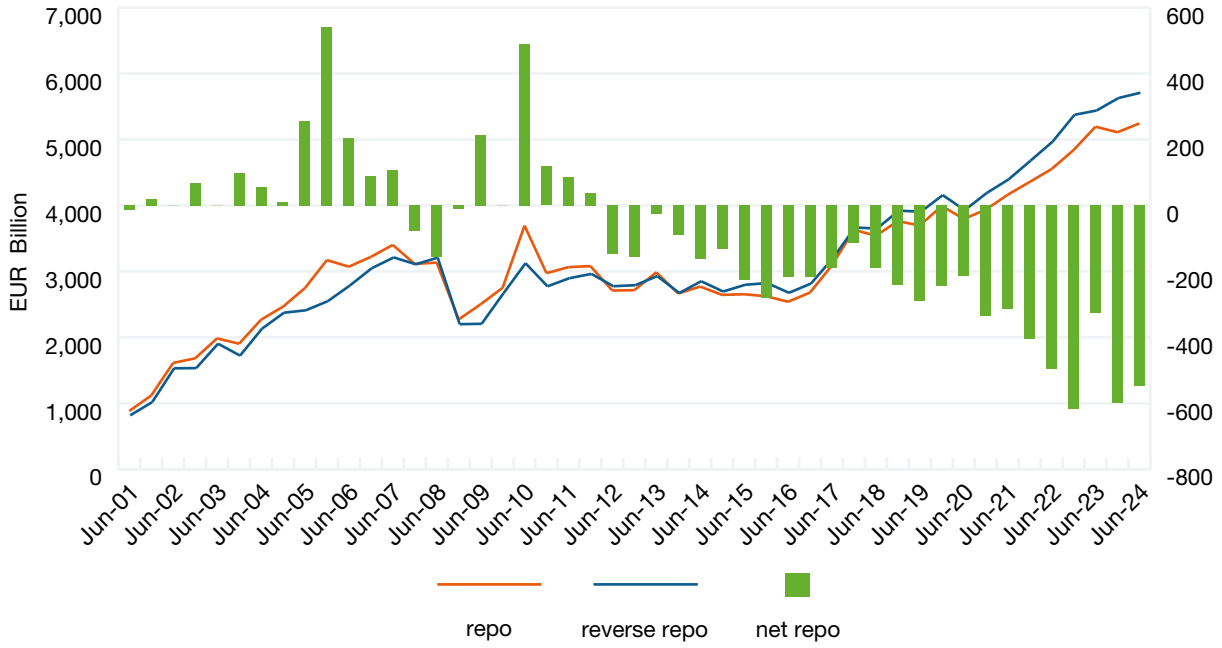
From 2016 until the December 2022 survey, the net cash lending position of the survey sample trended up, reflecting abundant central bank liquidity, including that provided after the "dash for cash" at the start of the Covid-19 pandemic lock-down (see Figure 2.2). By December 2022, this net cash lending had reached the equivalent of 6.0% of the total outstanding value of the survey (EUR 617.2 billion). Then, in June 2023, there was a sharp contraction in the net reverse repo position of the survey sample to 2.3% of the total outstanding value of the survey (EUR 252.1 billion).

The June 2023 reversal suggested there had been a shift away from collateral borrowing and securities-driven repo by the survey sample (who are mostly market intermediaries), possibly in response to the increased supply of securities from the unwinding of central bank assistance and new issuance. In fact, it was mainly driven by the redeployment of the balance sheets of major dealers from Europe to the US and Asia, in pursuit of more promising trading opportunities.

In the December 2023 survey, net cash lending by the survey sample recovered to 5.4% of the survey, as the drop in the share of reverse repo and the recovery in repo seen in June were reversed. However, the recovery did not extend the upward trend in the net reverse repo position of the survey sample in terms of absolute size (this fell to EUR 598 billion from EUR 617 billion in December 2022).

In the latest survey, the sample's net reverse repo position declined to 4.9% of the survey total (EUR 547 billion). It is possible that the recent growth in the net reverse repo position of the sample is at a turning point and may be starting to trend down, which would be consistent with the expected effect of quantitative tightening (QT).

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 measurement of the flow of new repos between two dates is useful for some business and market analyses, the stock of transactions outstanding on one date was adopted because this gauges risk exposure and open interest in the market.

However, outstanding value understates the share of shorter-term repos, given that such transactions run off faster between surveys than longer-term repos. The consequence is that – because repos traded on automatic trading systems (ATS) and cleared on a central counterparty (CCP) are typically very short-term – 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.

When interpreting changes in outstanding balances, it needs to be remembered that these 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. Moreover, the survey will include one-day repos transacted on or before the survey date but not due to be settled until the business day after the survey date and on the following business day (that is, tom/next or spot/next value dates). 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 participants. However, a study by the author (see the report of the December 2012 survey) suggested that inflation due to this problem of double-counting was not 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 Regulations (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 should include their reserve management operations in the repo market with survey participants.

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 entities into and out of the survey; mergers between banks; or the reorganisation of repo books across 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 in several surveys.

In the case of the latest survey, the growth since December 2023 in the repo books of the sub-set of 59 survey participants who had participated in the latest three surveys was +1.7%, compared to +3.1% for the full survey sample, and +4.9% year-on-year, compared with +6.3%. Growth in the repo books of the survey sample therefore decelerated in terms of adjusted changes, after an acceleration in December, in contrast to the headline totals, which suggested the reverse.

Between December 2023 and June 2024, 35 of the 61 entities who responded to the latest survey expanded their repo books (compared with 29 out of 60 between June and December 2023). The repo books of another

25 entities contracted over the same period (compared with 29 between the previous two surveys). Growth was therefore more broadly spread across the survey sample in the first-half of 2024 than in the second-half of 2023, although a little less than in the previous semester.

There was further growth in the median size of the repo books of the survey sample to over EUR 55 billion from about EUR 52 billion but little growth in the mean (at almost EUR 192 billion), resulting in a less negative skew to the size distribution of repo books across the sample (skewness fell to 2.6 from 2.8). The weighted-average change across all repo books was +4.1% compared with +5.7% in the second-half of 2023 and +9.7% in the first-half. The weighted change in the median accelerated to +3.0% from +0.8% but this was well below the increase of +9.1% seen in the same semester of 2023. The unweighted-average change in the first-half of 2024, for the participants who expanded their repo books, fell back further to +27.1% from +43.5% in December 2023 and +54.2% in June 2023. For those who contracted their books, the change accelerated to -19.2% from -12.9% in the second-half of 2023 and -15.3% in the first-half.

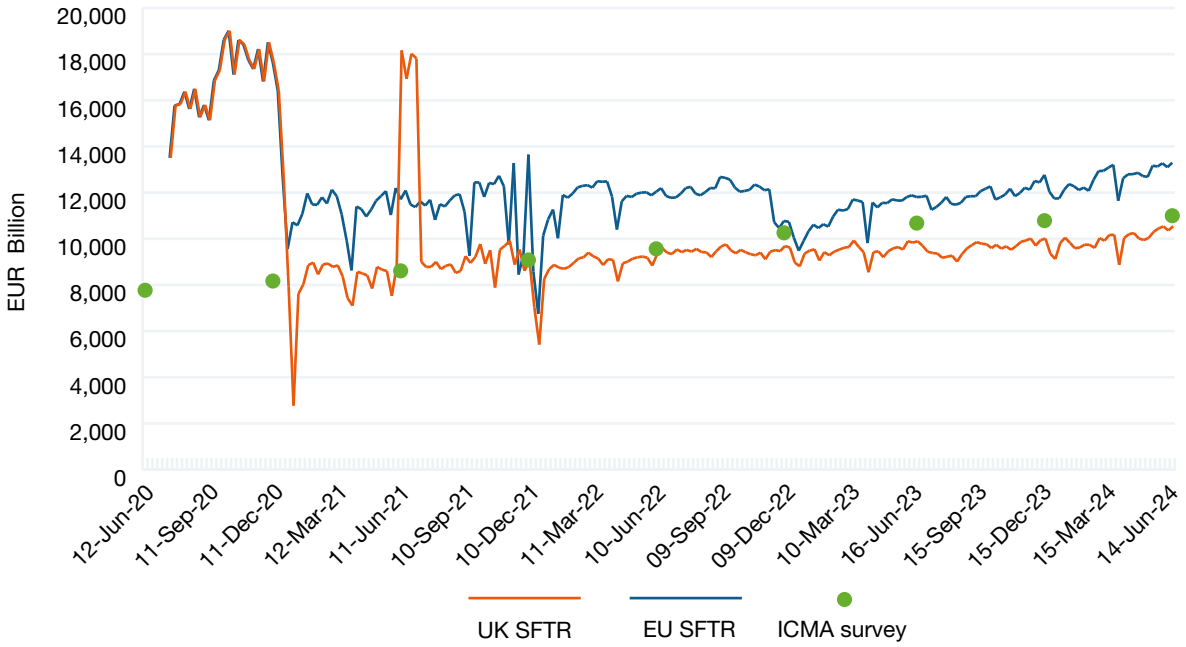
The estimated turnover of the survey sample

Entities accounting for almost 54% of the total value of the latest survey reported their repo turnover over the six months since the previous survey. Grossing up the reported turnover, by the combined share of the outstanding value of the survey of those participants who did not report their turnover, would suggest that the daily average turnover for the whole survey sample over the first-half of 2024 could have been almost EUR 1,958 billion per day. This compares with EUR 2,270 billion between the two previous surveys (-14%) and EUR 2,846 billion over the interval before that.

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 June 14, 2024 (the SFTR reporting date closest to the latest survey date), of all outstanding repos reported to regulators was EUR 13,293 billion in the EU and EUR 10,325 billion in the UK, totaling EUR 23,566 (see Figure 2.3). This compares with a total of EUR 22,777 billion on December 15, 2023 (the SFTR reporting date closest to the previous survey date) and represents an increase of +3.5%, which was similar to the change in the headline numbers of the survey sample. It also shows that the size of the survey was equivalent to almost 47% of the EU and UK SFTR total in June, down from some 48% in December and 50% in June 2023. While this 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.

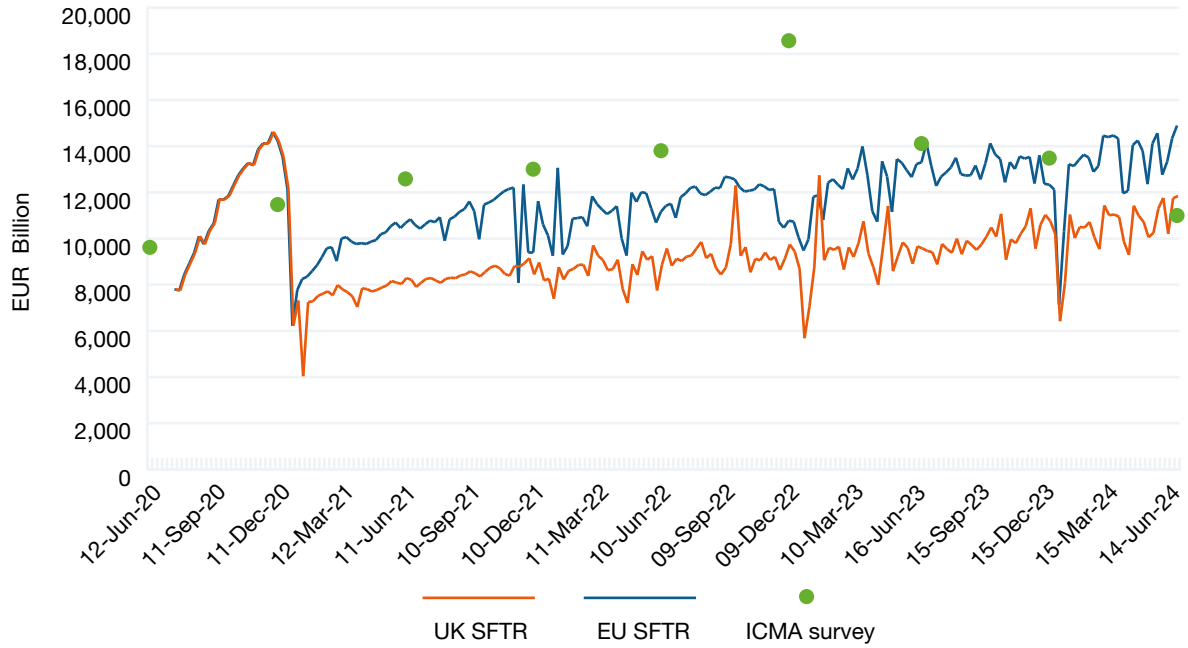
Figure 2.3 – ICMA survey versus SFTR public data: outstanding amounts



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

Turnover in repo reported under SFTR – between the week ending December 15, 2023, and the week ending June 14, 2024 (approximately the same interval as that covered by the survey) – averaged EUR 2,741 billion per day in the EU and EUR 2,168 billion per day in the UK, totaling EUR 4,909 billion, compared with a corrected EUR 4,611 billion in the previous semester (see Figure 2.4). This represents a rise of +6.5% over the previous six-month average and is, once again, in the opposite direction to the survey estimate (-1.4%). The turnover estimated in the survey (EUR 1,958 billion a day) fell to almost 40% of the SFTR total from under 43%.

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



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

Trading analysis (Q1.1)

Figure 2.5 – Trading analysis

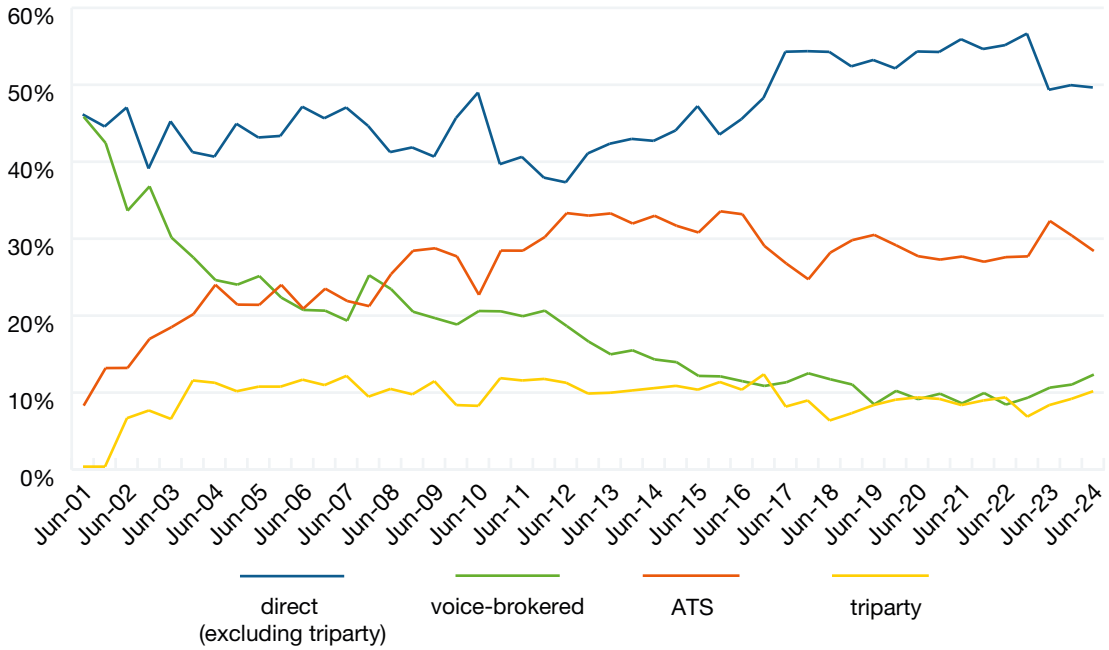


Table 2.2 – Trading analysis

	June 2024		December 2023		June 2023	
	share	users	share	users	share	share
direct	59.8%	61	59.1%	60	57.7%	62
of which tri-party	*9.8%*	*40*	*8.8%*	*42*	*8.0%*	*44*
voice-brokers	12.0%	41	10.7%	41	10.3%	41
ATS	28.2%	47	30.2%	47	32.1%	47

The share of ATS repo in the books of the survey sample contracted again in June, reflecting the continued faster growth in voice-brokered and tri-party repo (see Figure 2.5). Voice-brokered positions are likely to have benefited from their generally longer term-to-maturity, which means they persist longer between surveys, especially given the shortening in average maturity in other market segments revealed in the latest survey, in particular, in ATS repo (see below). Direct business that was not managed by a tri-party agent also contracted.

The fall in the share of ATS and bilaterally-managed direct business may have reflected the reduction in the trading of specific collateral securities, as central banks sold bonds back to the market and issuance picked up, thereby lessening the scarcity of collateral. Less intense collateral trading may also have reduced the need for dealers to rebalance cash and collateral inventory, an activity that tends to be performed on ATS.

Growth in tri-party repo managed and reported separately by the two ICSDs (International Central Securities Depositories) and SIS (in Switzerland) accelerated to +19.5% from +8.3%, to reach EUR 803.4 billion, compared with EUR 672.5 billion in December.[4] If global custodians are included, the acceleration in the growth of tri-party repo was even faster, rising to +20.1% from +5.5%.

The share of tri-party repo in the survey sample rose to 9.8% (the highest since December 2016) and its value in the survey reached a new all-time high of EUR 1,084 billion (this is larger than the figure reported by the ICSDs and SIS, in part, because it includes tri-party repo outside Europe).

4 The ICSDs are Clearstream Banking Luxembourg and Euroclear Bank.

Its sustained recovery would seem to be driven by reduced excess liquidity at central banks and greater demand for cash from the market.

Growth in tri-party repo became less dependent on GC financing in the first-half on 2024. The share of GC financing fell back to 15.2% of tri-party positions in the survey and 33.0% of tri-party positions reported separately by the ICSDs and SIS, from 18.7% and 39.2%, respectively.[5] GC financing accounted for 1.5% of the positions of the survey sample, down from 1.7% in December. However, its share of tri-party positions built up through trading on ATS was steady, at 8.3%.

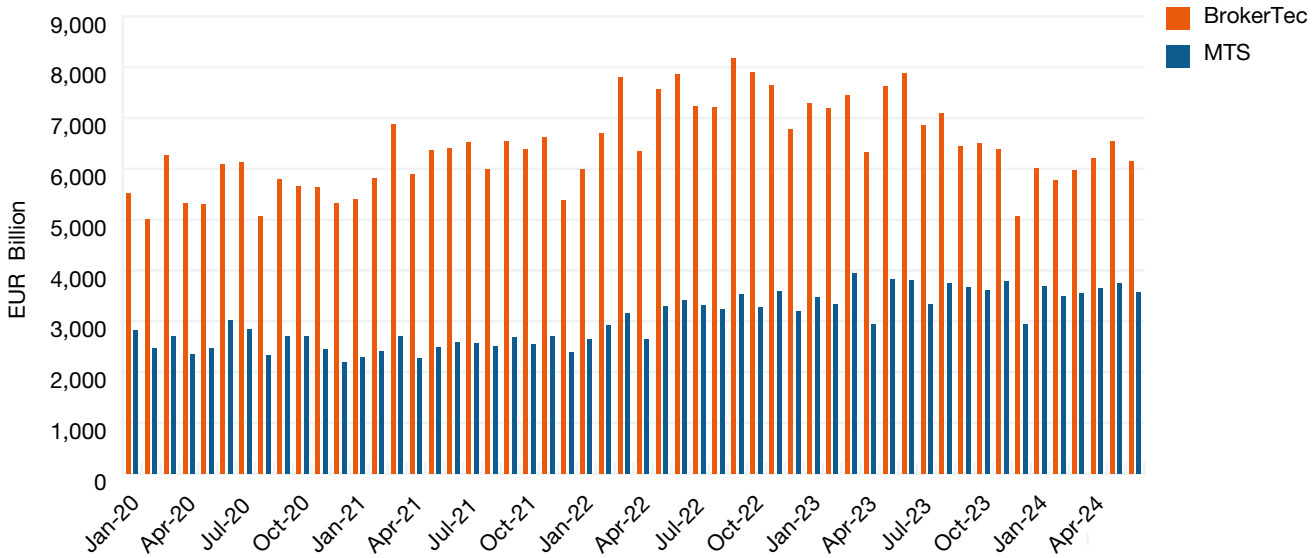
The net cash borrowed through tri-party repo by the survey sample increased to the equivalent of 5.1% of the total survey size from 4.1% in December, despite a continued fall in the number of survey participants reporting tri-party repo. The share of gross cash borrowing by the survey sample rose to 76.1% from 73.4% of combined tri-party gross borrowing and lending positions.

Table 2.3 – Numbers of participants reporting particular types of business

	Jun-24	Dec-23	Jun-23	Dec-22	Jun-22	Dec-21
ATS	47	47	47	48	45	46
anonymous ATS	43	43	41	43	40	44
voice-brokers	41	41	41	32	36	34
tri-party repos	40	42	44	49	42	45
total	61	60	62	61	56	56

The further fall in the share of positions executed by the survey sample across **automatic trading systems (ATS)** – to 28.2% from 30.2% – contrasted with a recovery in the outstanding value of ATS-traded repos reported separately by the principal platforms in Europe. This reached an all-time high of EUR 1,764.0 billion from EUR 1,584.8 billion in June (+11.3% compared with -9.9% over the previous half-year).

Figure 2.6 – Monthly turnover in European repo on BrokerTec and MTS

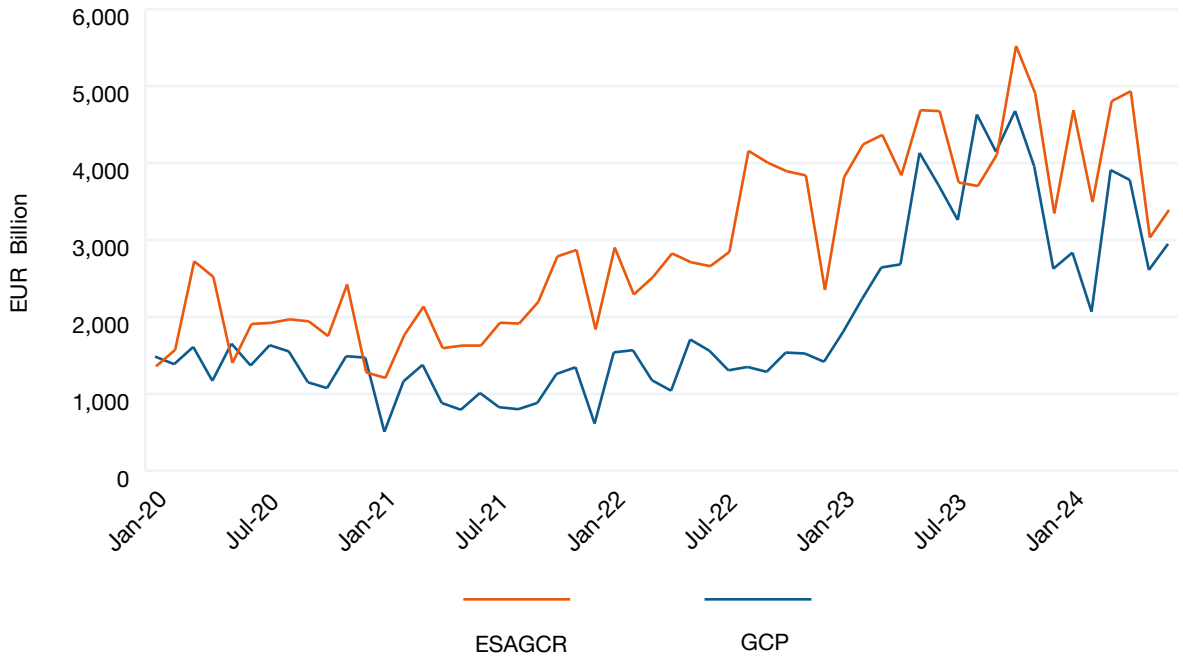


Sources: CME, Euronext

5 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.

In terms of turnover, BrokerTec's business revived in the first-half of 2024 but growth remained slower than in recent years. Turnover on MTS was stable (see Figure 2.6).

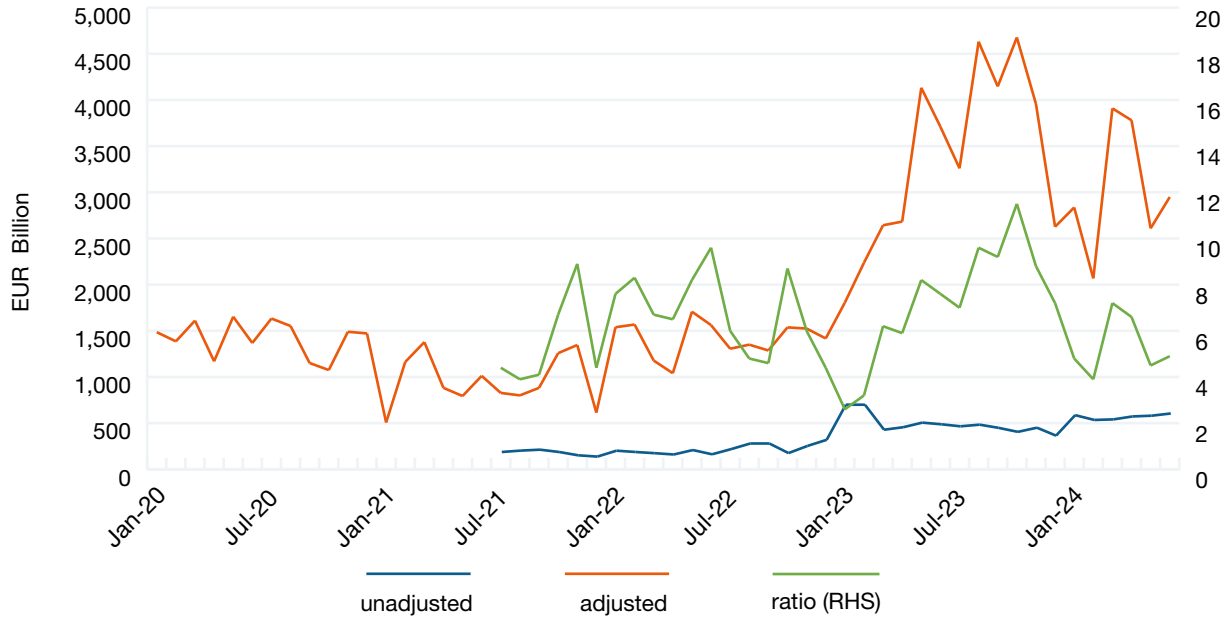
Figure 2.7a – Average daily term-adjusted turnover on Eurex repo trading systems



Sources: Eurex, author's calculations

Turnover on a term-adjusted basis on the two repo platforms of Eurex seems to have peaked in the last semester. Term-adjusted average daily turnover on what is now called Eurex Repo Special and GC (ERSGC) was EUR 178.4 billion, little changed from EUR 176.1 billion in December, while GC Pooling (GCP) grew by +12.2% to EUR 155.2 billion per day from EUR 138.3 billion (see Figure 2.7a). However, on an estimated unadjusted basis, there seems to have been a distinct step-up in turnover on GCP to about EUR 27 billion a day from EUR 21 billion, a rise of almost +31% (see Figure 2.7b).

Figure 2.7b – Average daily turnover on Eurex GC Pooling

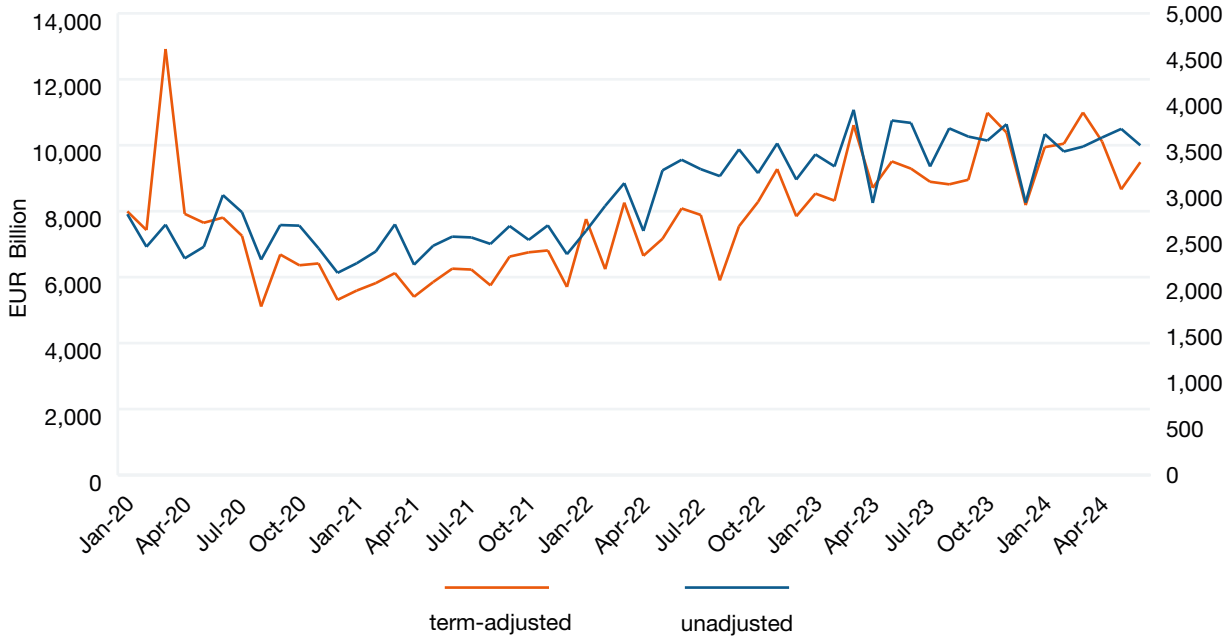


Sources: Eurex, STOXX, author's calculations

In the case of GCP, the estimated ratio between term-adjusted turnover and unadjusted turnover was lower than in the second-half of 2023, implying a shortening of the average term-to-maturity. However, there appears to have been a significant but short-lived extension in term in March.

Turnover on MTS, which publishes monthly turnover data that are both unadjusted and term-adjusted, also shows a temporary lengthening of terms in March (as in Eurex GCP) but a sharp reduction in May. Otherwise, term-adjustment seem to have had little impact on changes in positions built up on MTS (see Figure 2.8).

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



Source: Euronext

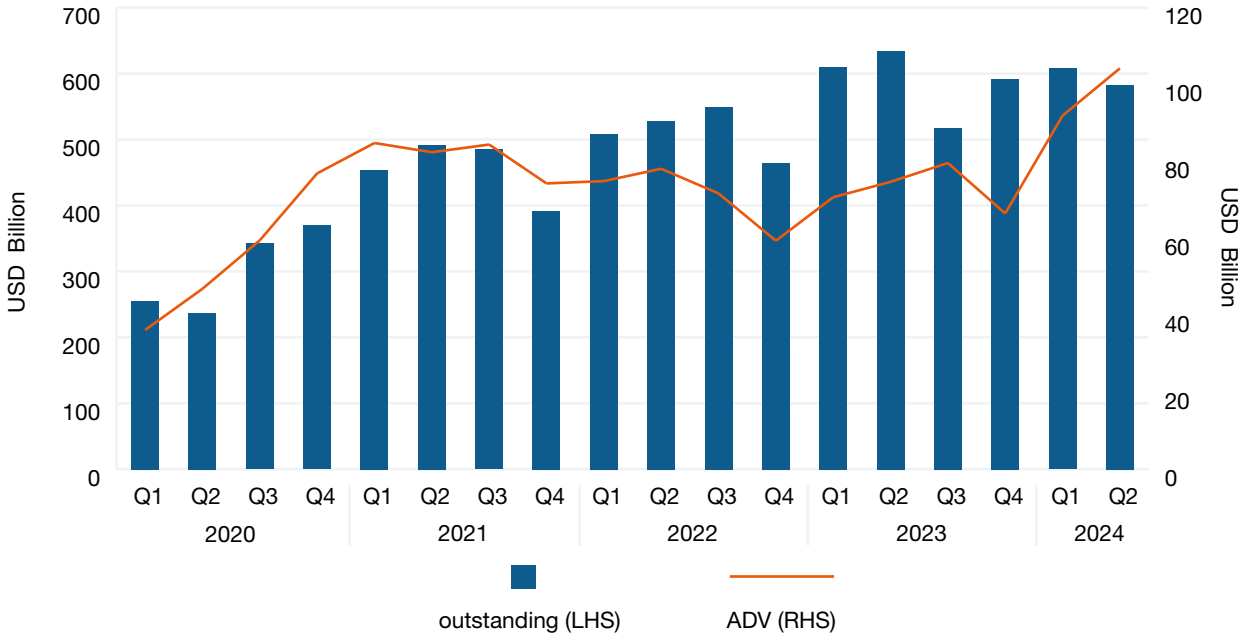
The difference between the outstanding value of and turnover in ATS repo may have been accentuated in the first-half of 2024 by a general shortening of tenors, which meant that more of these positions ran off before the survey date. Thus, the share of ATS-traded repos with one-day remaining to maturity jumped to 93.4% from 83.8% in December, mainly at the expense of other short-dated transactions with less than one week to maturity.

ATS activity, as reported separately by the platforms, remain overwhelmingly CCP-cleared (up to 96.8% from 96.2% in June). Excluding SIS increases the share of CCP-cleared repos to almost 100%.

The ICMA survey includes data from both of the principal **automated repo trading systems** that operate in the dealer-to-customer (D2C) market segment in Europe, that is, GLMX and Tradeweb.[6] The combined growth in average daily turnover on these platforms was +37.4% over the first-half of 2024 compared with the second-half of 2023 and +19.2% in outstanding value, continuing strong trend growth in automation of trading in the D2C segment. Much of this is now driven by hedge funds.[7]

Turnover on Tradeweb's European platform expanded rapidly over the first semester of 2024, reaching USD 104.9 billion per day (+33.4% since December and +34.5% year-on-year) (see Figure 2.9). However, outstanding balances, which had grown substantially in Q4 2023, fell back over Q2 2024 to USD 583.0 billion (-1.4% since December and -8.0% year-on-year). Growing turnover versus falling outstandings over the first-half of 2024 implies shorter tenors, in line with other survey data.

Figure 2.9 – Monthly turnover and outstanding value in European repo on Tradeweb



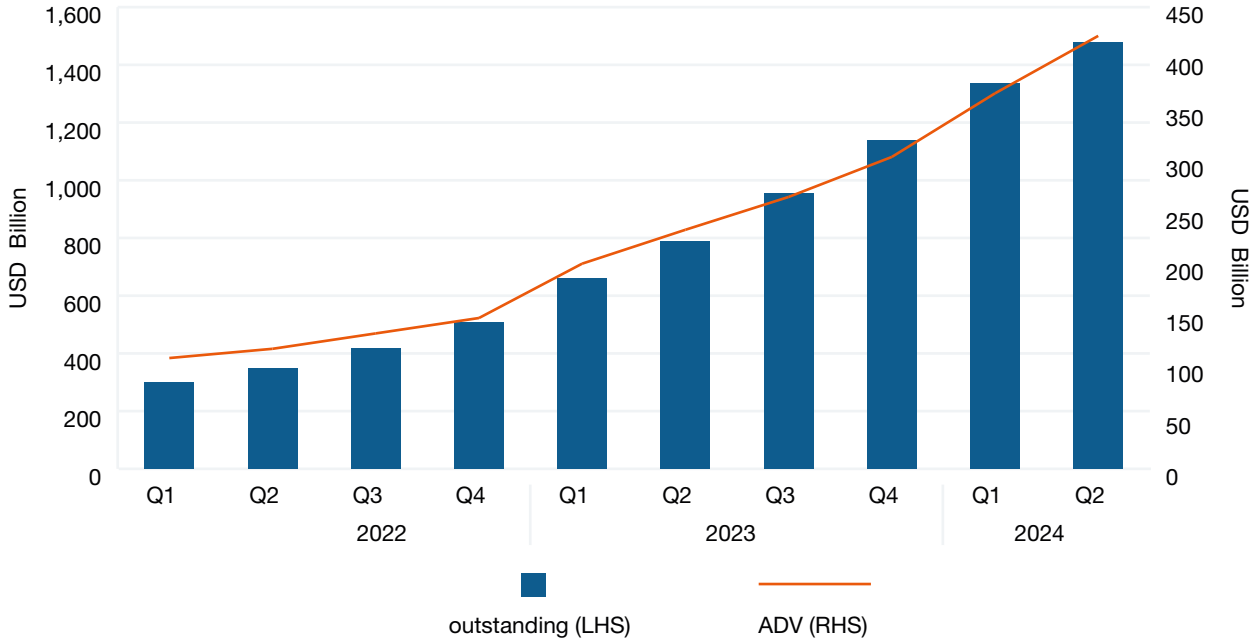
Source: Tradeweb

On GLMX, strong growth in average daily turnover in Europe continued over the first-half of 2024 to average USD 394 billion per day, compared with USD 285 billion in the second-half of 2023, an increase of +38.4% since December and +82.0% year-on-year (see Figure 2.10). The value of outstanding repo negotiated across GLMX grew by +30.0% over the first-half of 2024 and +87.6% year-on-year to USD 1,478 billion. These numbers suggest a more modest shortening of average term-to-maturity than on Tradeweb, where transactions continue, on average, to be longer-term than on GLMX.

6 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.

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

2.10 – Monthly turnover and outstanding value in European repo on GLMX



Source: GLMX

Geographical analysis (Q1.1)

Table 2.4 – Geographical analysis

	June 2024		December 2023		June 2023	
	share	users	share	users	share	users
domestic	23.2%		22.1%		21.6%	
cross-border to (other) eurozone	18.8%		18.9%		19.5%	
cross-border to (other) non-eurozone	39.4%		41.2%		39.1%	
anonymous	18.6%	43	17.8%	43	19.8%	41

Domestic and **anonymous** (CCP-cleared) positions gained share at the expense of **cross-border** business, particularly into and out of the eurozone. The retreat of cross-border business into and out of the eurozone may have reflected a reversal, at least in part, of the transfer of balance sheet capacity by dealers from Europe to the US and Asia in the second-half of 2023.

In terms of trends, it would appear that the secular decline in domestic and cross-border business within the eurozone started to level out, while the uptrend seems to have continued in cross-border business into and out of the eurozone. Anonymous positions trended sideways.

Figure 2.11 – Geographical analysis

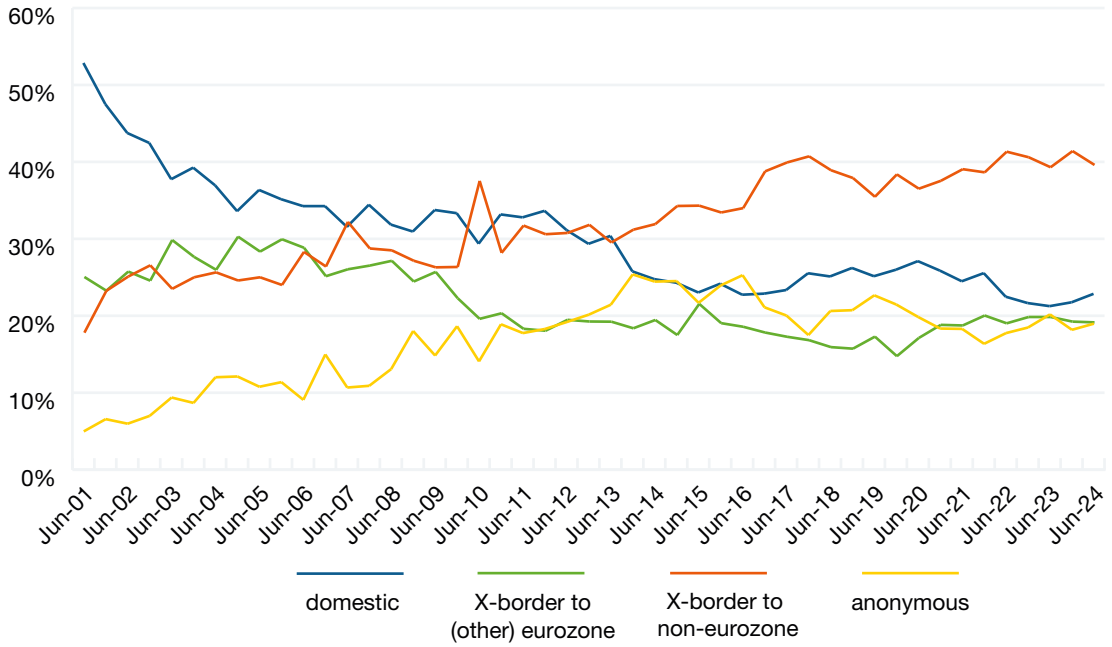
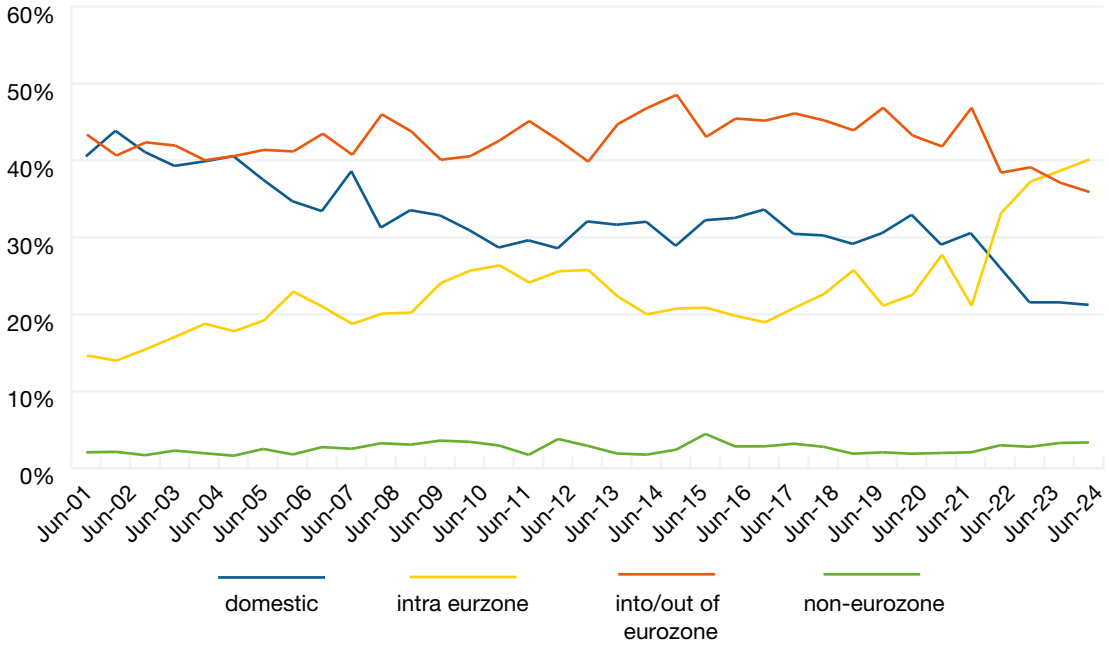


Table 2.5 – Geographical comparisons in December 2023 (June 2023)

	main survey	ATS	tri-party
domestic	23.2% (22.1%)	21.6% (21.3%)	29.8% (28.5%)
cross-border	58.2% (60.1%)	78.4% (78.7%)	70.2% (71.8%)
anonymous	18.6% (17.8%)		

In the data reported separately by the ATS, the share of business within the eurozone continued its exceptional rise, although at a decelerating rate (see Table 2.5 and Figure 2.12). Much of this has been a reflection of developments in GC financing.

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



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

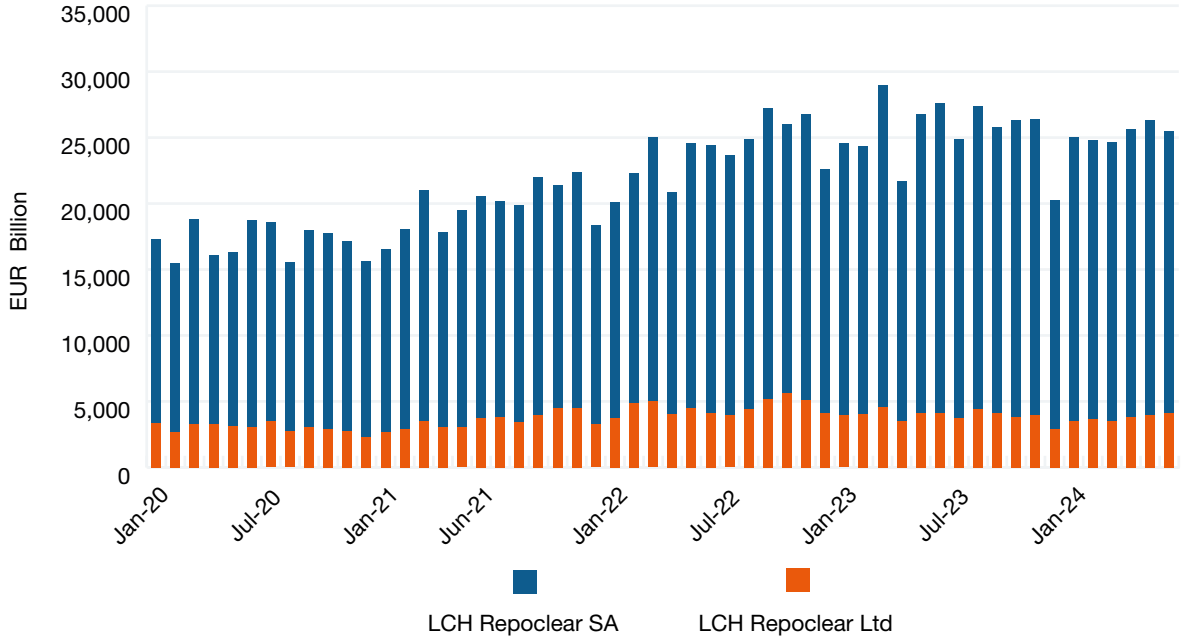
Clearing analysis (Q1.2 and Q1.8)

The outstanding value of **anonymous (CCP-cleared) repo trading** by the survey sample, excluding GC financing, increased slightly, by +1.2% to EUR 1,691.4 billion in June 2024 from EUR 1,674.5 billion in December 2023.

GC financing grew to EUR 289.5 billion from EUR 180.9 billion (+60.0%), increasing its share of the survey sample to 2.7% from 1.7% and helping to take the overall share of anonymous trading to 18.6% from 17.8% (+6.8%).

The modest growth in anonymous repo trading excluding GC financing mirrors the growth in LCH RepoClear, which is the largest repo CCP in Europe and the only one to publish its activity (see Figure 2.13). The average nominal value of collateral cleared per month on RepoClear over the first-half of 2024 grew by +0.6%. This was the net result of a reduction of -1.7% in turnover on LCH SA (euro-denominated repo) and growth of +1.0% in LCH Ltd (sterling-denominated repo).

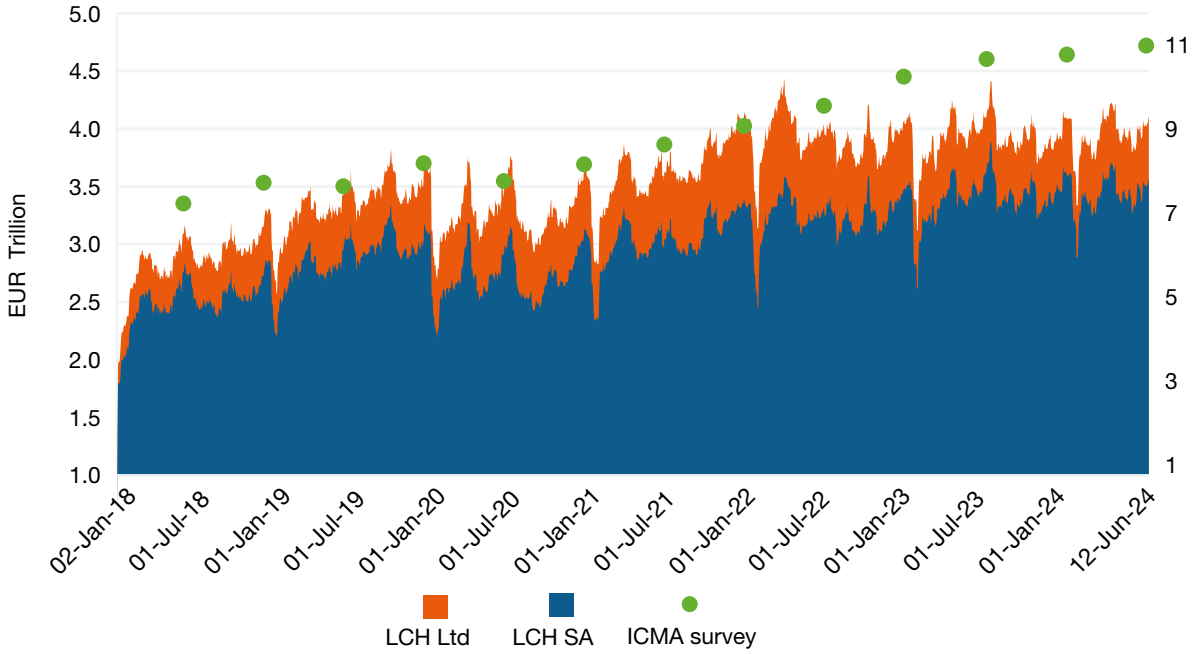
Figure 2.13 – Monthly cleared nominal turnover on LCH RepoClear in 2020-23 (EUR billion, double-counted)



Source: LCH

The outstanding nominal value of repo collateral cleared by LCH RepoClear (calculated using the ICMA survey methodology) continued to lag behind the growth in the repo books of the survey sample (see Figure 2.14). In the past, this was largely due to the decline in CCP-cleared balances of sterling-denominated repo at LCH Ltd. However, between the June 2024 and December 2023 survey dates – dates selected to reduce the impact of the seasonal drop in repo activity at end-year – balances at LCH Ltd grew by +14.2%. On the other hand, the outstanding value of cleared euro-denominated repo at LCH SA fell by -2.3%. Overall, balances at RepoClear fell by -0.4% between the last two surveys.

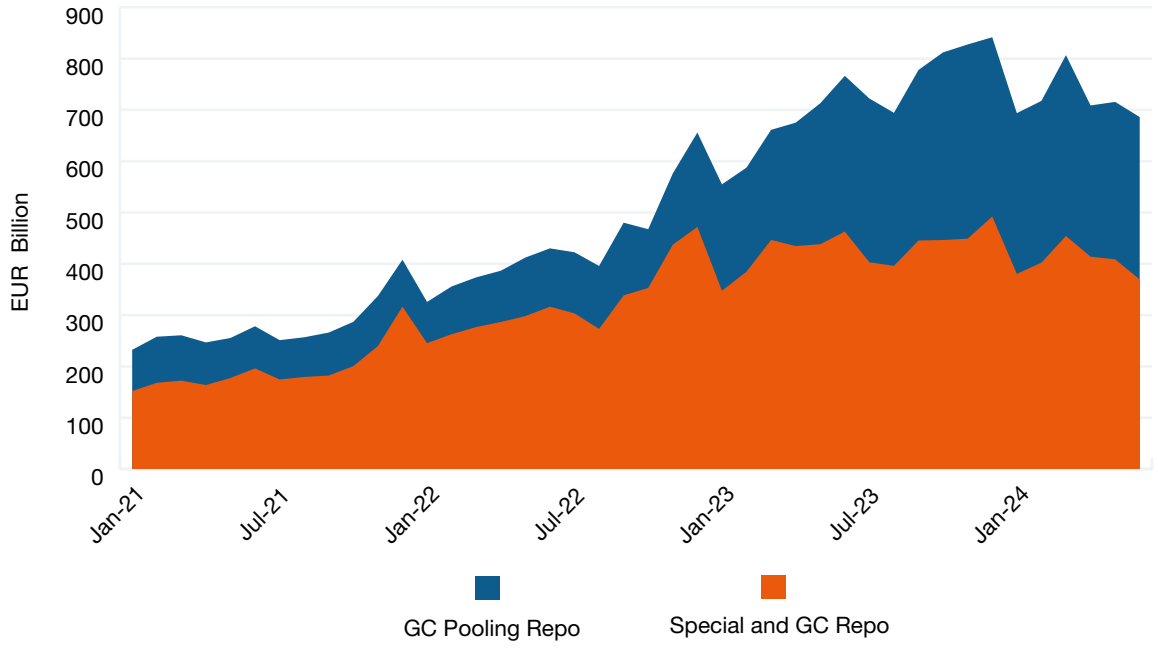
Figure 2.14 – Daily outstanding nominal value of cleared repos on LCH RepoClear 2018- 2023 (EUR trillion, double-counted)



Source: LCH

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 are available from 2021, it can be seen that the outstanding value of CCP-clearing of transactions executed on ERSCG – and calculated using the ICMA survey methodology – levelled off in 2023, while GCP peaked in the second-half. In the first-half of 2024, positions built up by trading on both platforms recovered from the seasonal end-year hiatus to peak in March but finished slightly lower than the levels reached in 2023.

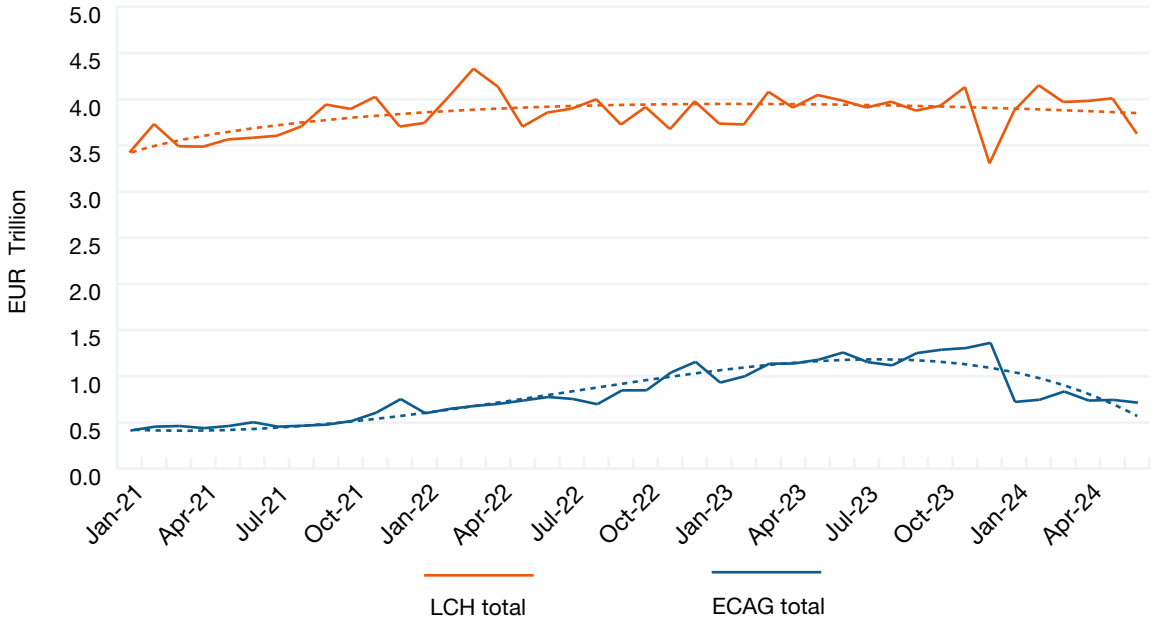
Figure 2.15 – Daily outstanding value of cleared repos on ECAG 2021-23 (EUR trillion, double-counted)



Source: ECAG

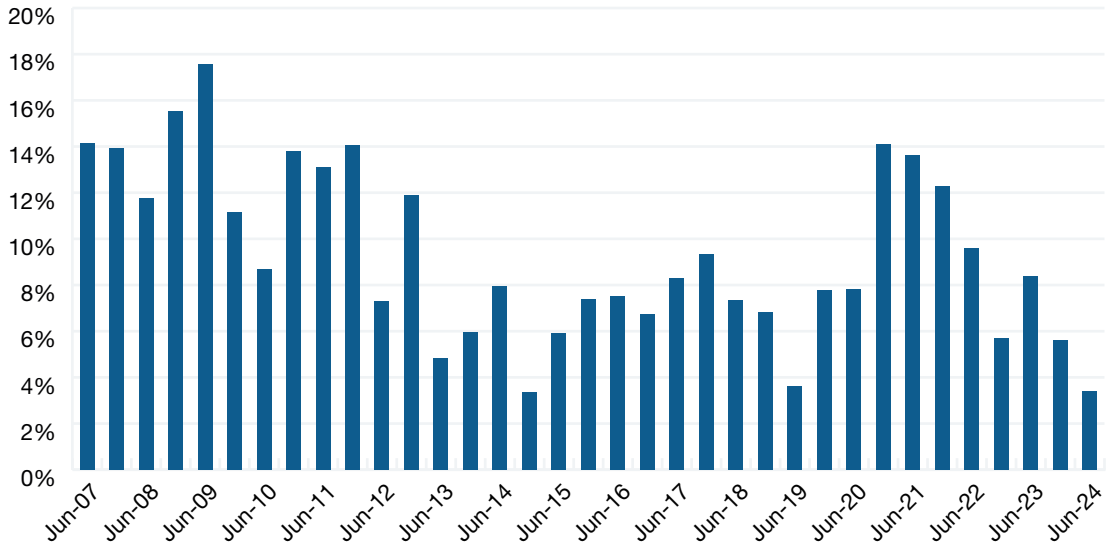
Figure 2.16 compares the outstanding values of balances at LCH and ECAG. The share of LCH jumped back to 84.2% of the combined outstanding value at end-June 2024, compared with a low of 72.7% at end-December, reflecting a sharper recovery at LCH after the end-year.

Figure 2.16 – Daily outstanding value of cleared repos on LCH vs ECAG 2021-23 (EUR trillion, double-counted: calculated using same methodology as the ICMA survey)



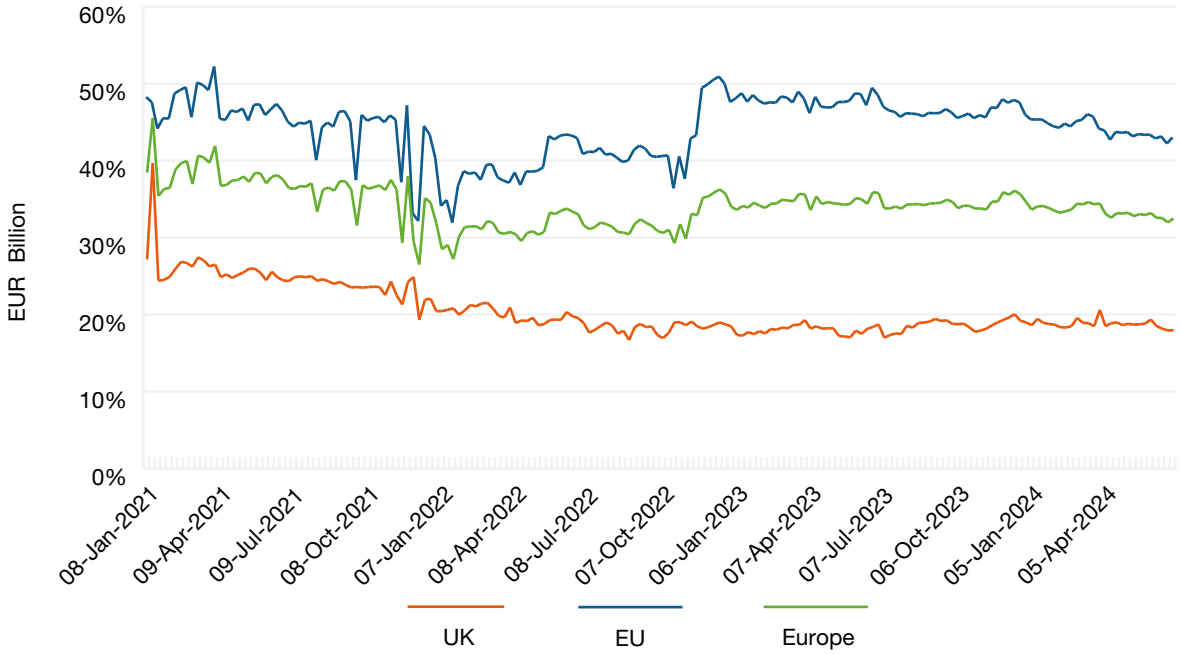
While the bulk of CCP-clearing is of repos transacted on ATS, a declining although still significant proportion of trading continues to be directly between parties and registered with a CCP post-trade (see Figure 2.17). The share of this post-trade clearing by the survey sample fell to 3.4% in June from a revised share of 5.6% in December 2023, well down from the recent peak of 14.1% in December 2020 (but equal to 15.3% of all CCP-clearing by the survey sample).

Figure 2.17 – Post-trade CCP-clearing



The value of outstanding CCP-cleared repo in SFTR public data for the UK and EU grew, between ICMA survey dates, by +10.5% and +6.3%, respectively, and by +7.3% for Europe as a whole. However, faster growth in the overall market meant that the share of CCP-clearing continued to drift down over the first-half of 2024. In the UK, the share of CCP-clearing fell to 17.8% from 18.8%. In the EU, the fall was greater, to 43.4% from 46.3%. The combined share of CCP-clearing in EU and UK SFTR public data declined to 32.1% from 34.3%. These numbers compare with 22.0% in the survey.

Figure 2.18 – Share of outstanding CCP-cleared repos reported under EU and UK SFTR (EUR trillion)

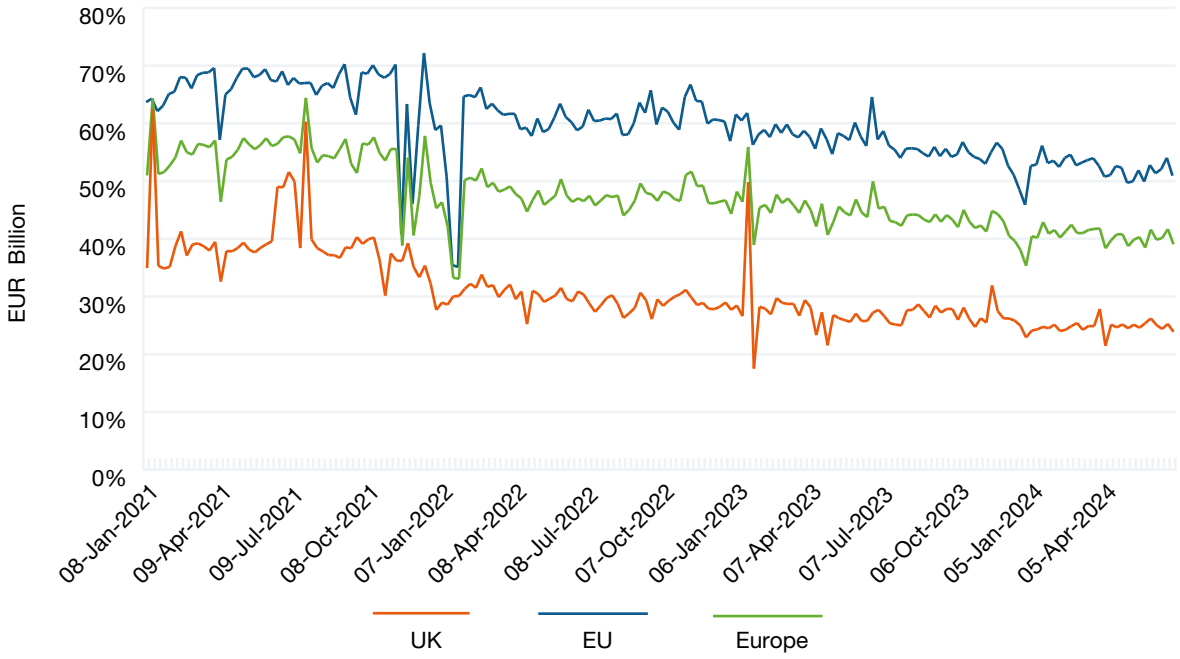


Sources: DTCC, KPDW, LSEG, RegisTR, author's calculations

SFTR data also showed growth in the value of turnover but contraction in market share. In terms of value, CCP-clearing in the UK expanded by +6.1% between ICMA survey dates; in the EU, by +7.4%; and in Europe as a whole, by +7.1%. In terms of shares, there was a distinct step-down in CCP-clearing in both the UK and EU. Between ICMA survey dates according to SFTR, CCP-cleared repos in the EU fell by -3.3%; in the UK, by -1.9%; and in Europe overall, by -2.9% (see Figure 2.19).

The growth in the outstanding value of CCP-clearing but contraction in shares suggests a shortening in the average term-to-maturity of CCP-cleared repos over the first-half of 2024. This is normal seasonal behaviour and consistent with other survey data.

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 in the share of the euro since 2020 – which has been sideways – was unchanged, with the continued growth in the share of the dollar offset by contraction in the share of Japanese yen (Figure 2.20 and Table 2.6).

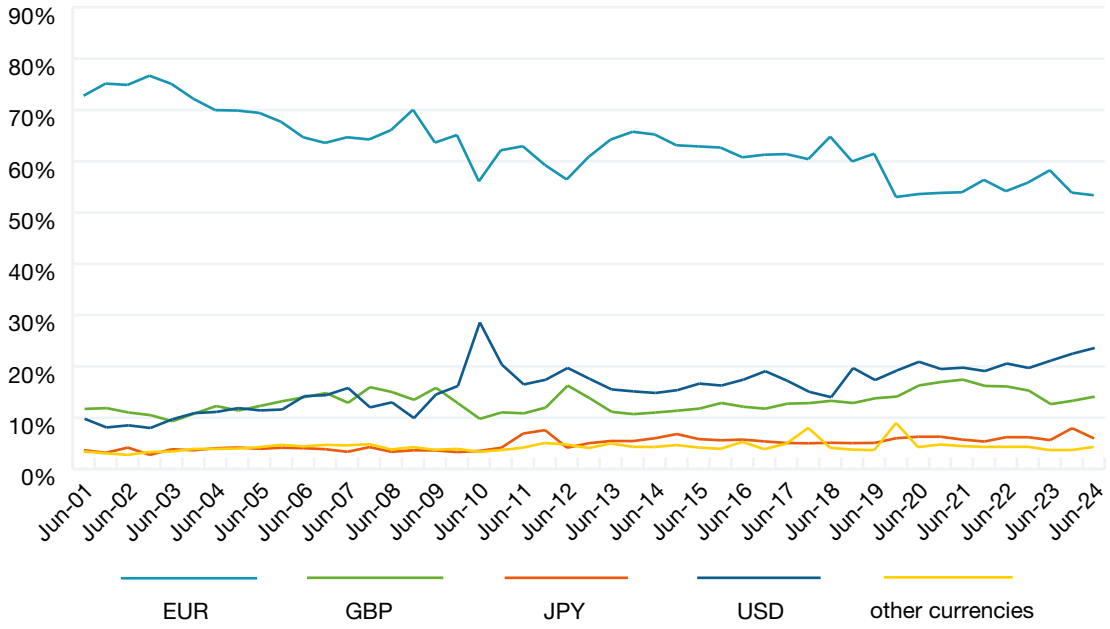
The growth in the dollar reflected swings in market expectations about the timing and even direct of interest rate cuts by the Federal Reserve but also high yields and the record issuance of Treasuries.

The share of sterling recovered, after having lost ground in 2022. This was probably on the back of current high yields, expectations of future rate cuts, the increased supply of new gilts and certainty about the result of the July general election. However, sterling repo positions remained below their 2021 peak.

Table 2.6 – Cash currency analysis

	June 2024	December 2023	June 2023
EUR	53.9%	54.4%	58.8%
GBP	13.6%	12.8%	12.1%
USD	23.3%	22.2%	20.8%
DKK, SEK	1.0%	1.2%	1.1%
JPY	5.4%	7.4%	5.1%
CHF	0.3%	0.2%	0.2%
other APAC	1.1%	0.8%	0.7%
other currencies	1.3%	1.0%	1.2%
cross-currency	1.7%	1.6%	1.6%

Figure 2.20 – Currency analysis



Tri-party repo, as reported separately by the ICSDs and SIS, for once, painted a similar picture to the survey data, with the shares of the euro and yen receding, while those of sterling and the dollar advanced (see Table 2.7).

Cross-currency tri-party repo, reported separately by the ICSDs and SIS, staged a dramatic recovery, rising to 49.2% from 33.1% in December.

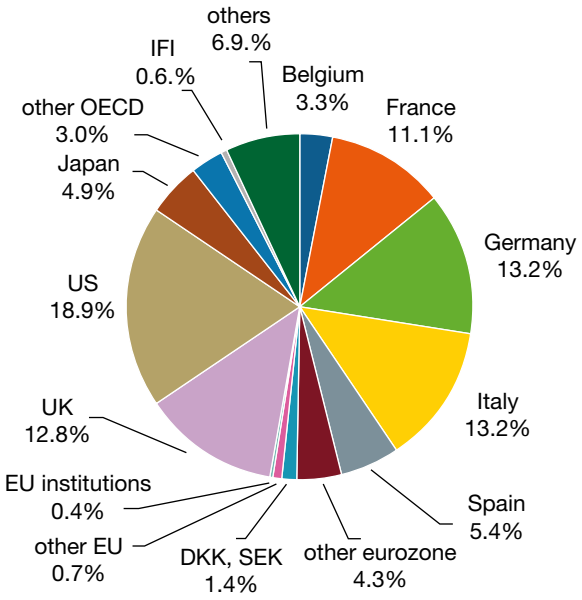
Table 2.7 – Currency comparison in June 2024 (December 2023)

	main survey	ATS	tri-party
EUR	53.9% (54.4%)	89.7% (89.8%)	69.4% (72.6%)
GBP	13.6% (12.8%)	7.2% (6.6%)	7.6% (5.7%)
USD	23.3% (22.8%)	0.3% (0.2%)	20.9% (19.3%)
DKK, SEK	1.0% (1.2%)		0.2% (0.5%)
JPY	5.4% (7.4%)	0.0% (0.0%)	0.7% (1.0%)
CHF	0.3% (0.2%)	2.7% (3.3%)	0.3% (0.0%)
other APAC	1.1% (0.8%)		0.2% (0.1%)
etc		0.1% (0.0%)	0.8% (0.8%)
cross-currency	1.7% (1.6%)		49.2% (33.1%)

Sources: Clearstream, Euroclear, SIS

Collateral analysis (Q1.9)

Figure 2.21 – Collateral analysis (main survey)



The growth in the share of US Treasuries accelerated, reaching an all-time high of 15.4% from 10.1% in December 2023, reflecting the factors listed above. The rise of US Treasuries was at the expense of some eurozone government securities, Japanese securities and other OECD issues. As a result, US Treasuries remained the largest collateral holding of the survey sample.

The share of UK gilts was maintained, also for reasons given above, but sterling repo positions remained below their 2021 peak.

The largest contractions in eurozone government securities were in French and German issues, which dropped to 10.4% from 12.3% and to 13.2% from 14.6%, respectively (see Table 2.8). There were increases in the shares of government securities issued by Italy (to 12.5% from 12.3%), Spain (to 4.8% from 4.6%) and Belgium (to 3.3% from 2.2%). Explanations include political uncertainty around a number of elections and their fiscal implications. In case of traditional safe assets like German and French government bonds, heavy issuance seems to have sated demand.

There was a sharp but narrowly-based recovery in holdings of pfandbrief to 1.6% from 0.1% of the survey sample. Pfandbrief were formerly a significant source of collateral (as much as 3.1% of the survey) but dwindled to almost nothing after the introduction of QE.

Securities issued by the EU being held as repo collateral amounted to 0.4% of the repo books of the survey sample, compared with 0.3% in December. However, in tri-party repo, as reported directly by the ICSDs and SIS, they were the fourth largest holding of collateral, although their share fell back to 6.3% from 7.1% in December (see Table 2.10).

Table 2.8 – Collateral analysis

	June 2024	December 2023	June 2023
Germany	13.2%	14.6%	14.6%
Italy	13.2%	12.9%	13.7%
France	11.1%	12.3%	14.5%
Belgium	3.3%	2.8%	3.5%
Spain	5.4%	5.2%	6.1%
other eurozone	4.3%	4.2%	4.4%
DKK, SEK	1.4%	1.6%	1.5%
former EU Accession	0.7%	0.3%	0.3%
EU institutions	0.4%	0.3%	0.2%
UK	12.8%	12.6%	12.8%
international institutions	0.5%	0.6%	0.6%
US Treasuries	15.4%	10.1%	8.0%
other US	3.5%	2.5%	2.2%
Japan government	4.8%	5.7%	3.8%
other Japan	0.1%	1.5%	1.4%
other OECD ex APAC	2.3%	6.2%	6.1%
other APAC OECD	0.7%	0.4%	0.3%
eurobonds	2.0%	1.9%	2.0%
other fixed income	4.7%	4.1%	3.7%
equity	0.2%	0.2%	0.3%

The most notable development in net positions of collateral securities held by the survey sample was a switch back to the net lending of US Treasuries collateral, reversing the flip to net borrowing in December 2023 that accompanied the shift of dealer balance sheets from Europe to the US and Asia in the second-half of last year. On the other hand, there was a switch back to net borrowing of Other OECD securities (that is, excluding European, US and APAC members of the OECD). Otherwise, net positions remained in the same directions.

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

net collateral lending		net collateral borrowing	
US Treasury	2.8%	UK government	1.8%
German non-government	1.1%	JGB	1.4%
German government	0.9%	Italian government	1.2%
Spanish government	0.8%	Other OECD	1.1%
Belgian government	0.8%	French government	1.1%
Belgian non-government	0.5%	Danish non-government	0.7%
pfandbrief	0.3%	European eurobond	0.4%
equity	0.2%	Czech government	0.3%
UK non-government	0.2%	Non-OECD APAC	0.3%
Dutch non-government	0.2%	Other eurobond	0.3%

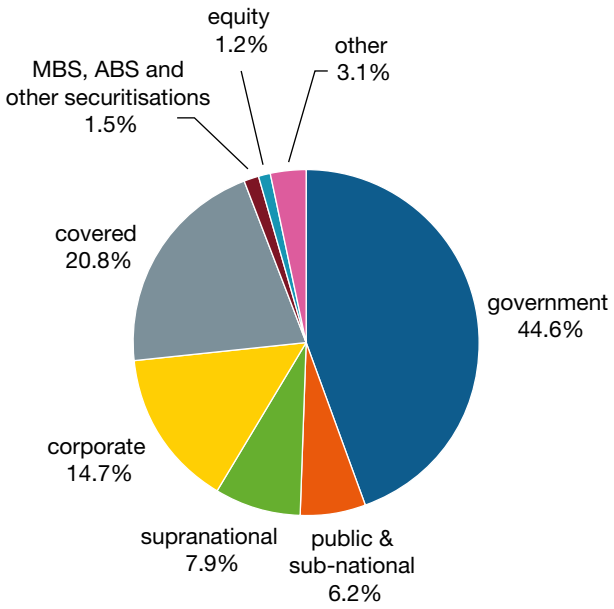
In tri-party repo managed by the ICSDs and SIS, allocations of government securities bounced back. Only convertible bonds could keep up. The value of covered bonds contracted as the impact of the ECB's TLTRO (Targeted Long Term Refinancing Operation) faded, their share falling to 20.8% from the peak of 28.2% in December 2023.

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

	June 2024	December 2023	June 2023
government securities	44.6%	34.7%	39.7%
public agencies / sub-nationals	6.2%	7.0%	7.4%
supranational agencies	7.9%	8.1%	7.8%
corporate bonds	14.7%	16.1%	14.0%
covered bonds	20.8%	28.2%	22.8%
residential mortgage-backed	0.7%	0.9%	3.7%
commercial mortgage-backed	0.2%	0.3%	1.1%
other asset-backed	0.6%	0.8%	0.4%
CDO, CLN, CLO, etc	1.0%	2.1%	1.2%
convertible bonds	2.6%	1.3%	1.3%
equity	0.5%	0.2%	0.2%
other	0.2%	0.2%	0.5%

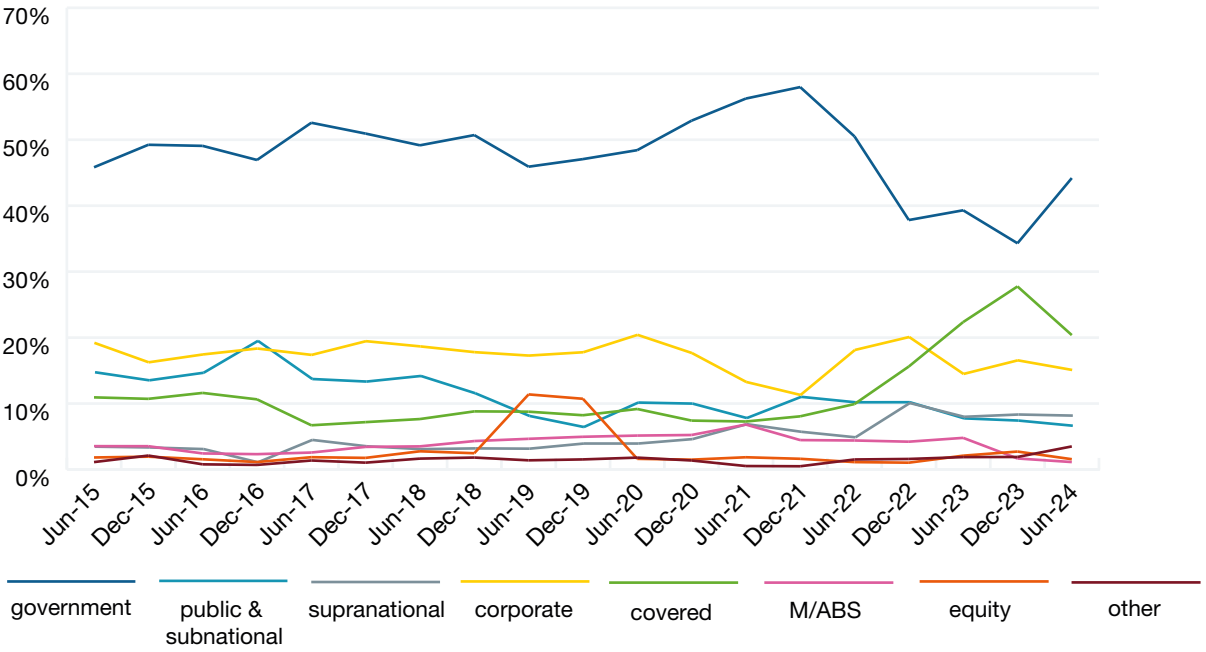
Sources: Clearstream, Euroclear, SIS

Figure 2.22 – Collateral analysis (selected tri-party agents) by type of asset



Sources: Clearstream, Euroclear, SIS

Figure 2.23 – Historic collateral analysis (selected tri-party agents) by type of asset



Sources: Clearstream, Euroclear, SIS

European eurobonds remained the largest class of security in tri-party collateral reported separately by the ICSDs and SIS. However, UK and French government bonds, and French non-government bonds, were the largest holdings on a national basis (7.7%, 7.6% and 6.8%, respectively), followed by securities issued by EU institutions (6.3%). US Treasuries climbed to 4.3% from 2.8% and JGBs to 3.8% from 2.3%. Spanish government bonds fell back to 1.2% from 2.8%.

Table 2.11 – Triparty repo collateral analysed by type of asset – largest changes (percentage of survey total)

increases		decreases	
French government	+1.9%	French non-government	-4.2%
UK government	+1.9%	European eurobond	-2.1%
US Treasuries	+1.5%	Belgian non-government	-1.9%
JGB	+1.5%	Spanish government	-1.6%
German government	+1.0%	Italian	-1.2%
Irish non-government	+1.0%	EU	-0.8%
Dutch government	+0.7%	Danish non-government	-0.7%
Dutch non-government	+0.6%	Austrian non-government	-0.4%
Other OECD	+0.5%	APAC eurobonds	-0.4%
APAC OECD (ex-Japan)	+0.4%		
pfandbrief	+0.4%		
Spanish non-government	+0.4%		

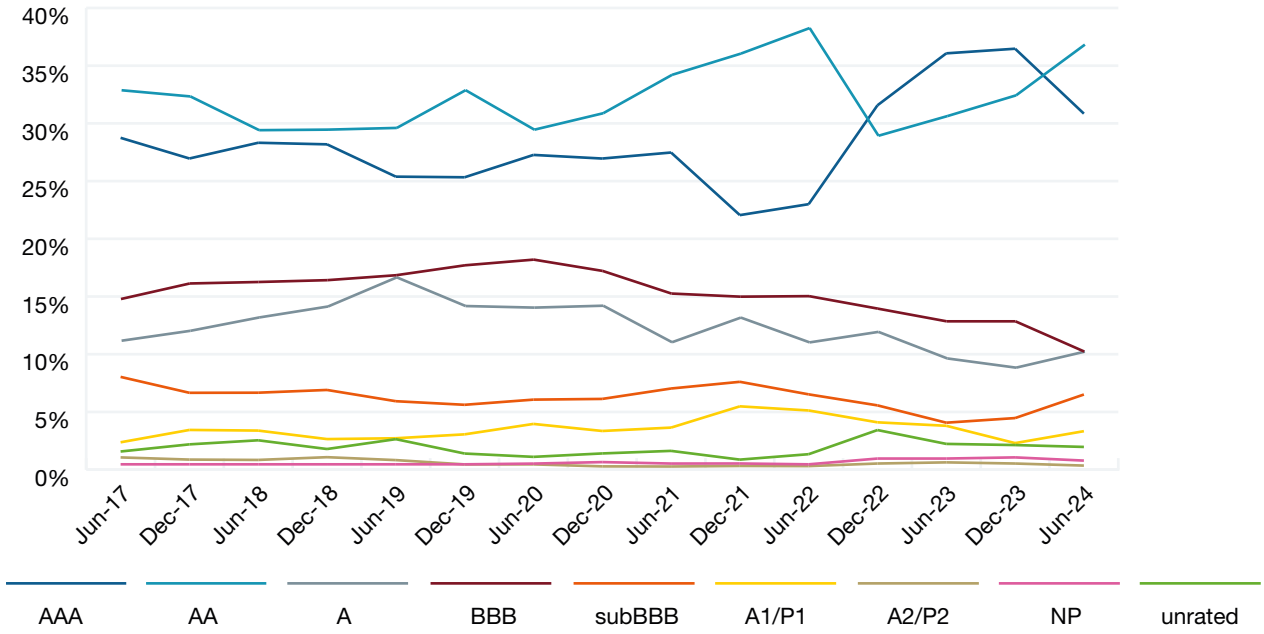
The balance of collateral positions in tri-party repo tilted further towards AA and A-rated securities and away from AAA-rated securities (see Table 2.12 and Figure 2.24). This reflected, in part, the shift from AAA-rated covered bonds to AA-rated government bonds.

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

	June 2024	December 2023	June 2023
AAA	31.1%	36.7%	36.3%
AA	36.6%	32.2%	30.4%
A	10.1%	8.7%	9.5%
BBB	10.0%	12.6%	12.6%
below BBB-	6.7%	4.7%	4.3%
A1/P1	3.3%	2.3%	3.8%
A2/P2	0.1%	0.3%	0.4%
Non-Prime	0.3%	0.6%	0.5%
unrated	1.7%	1.9%	2.0%

Sources: Clearstream, Euroclear, SIS

Figure 2.24 – Historic collateral analysis (selected tri-party agents) by credit rating



Sources: Clearstream, Euroclear, SIS

There was a general and significant moderation in weighted average haircuts on tri-party repo collateral. The exceptions were MBS and ABS, for which haircuts had dropped in the June 2023 survey (see Table 2.13). There was a particularly significant reduction in the average haircut on equity.

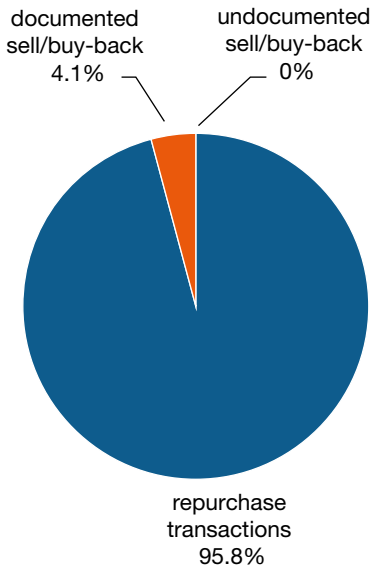
Table 2.13 – Weighted-average collateral haircuts (all tri-party agents) analysed by type of asset

	June 2024	December 2023	June 2023
government securities	2.2%	2.3%	2.7%
public agencies / sub-nationals	3.1%	3.7%	4.1%
supranational agencies	2.9%	3.6%	3.0%
corporate bonds (financial)	3.8%	4.3%	4.8%
corporate bonds (non-financial)	6.9%	7.1%	7.5%
covered bonds	2.3%	2.9%	2.8%
residential mortgage-backed	5.7%	4.9%	6.8%
commercial mortgage-backed	5.4%	4.5%	10.9%
other asset-backed	6.3%	5.3%	10.8%
CDO, CLN, CLO, etc	6.2%	8.2%	13.2%
convertible bonds	5.0%	9.7%	7.3%
equity	0.3%	6.5%	4.8%
other	2.0%	5.9%	5.0%

Sources: BoNYM, Clearstream, Euroclear, JPMorgan, SIS

Contract analysis (Q1.5)

Figure 2.25 – Contract analysis



The value and share of buy/sell-backs dropped in the latest survey. This type of repo tends to be limited to bilateral repo activity in a few domestic markets.

Table 2.14 – Contract comparison in June 2024 (December 2023)

	main survey	ATS	tri-party
repurchase transactions	95.8% (92.6%)	99.5% (93.8%)	100.0% (100.0%)
documented sell/buy-backs	4.1% (7.3%)	0.5% (6.2%)	
undocumented sell/buy-backs	0.0% (0.0%)		

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

The share of the ICMA Global Master Repurchase Agreement (GMRA) in the number of repo master agreements in place among survey participants was 87.9%%.

In December 2023, the survey started to ask participants for the outstanding value of repo business that they guaranteed or indemnified, including the various forms of "sponsored" repo. The survey sample reported that these transactions amounted to 4.1% of their total outstanding position. Some 66% were in euros and about 24% in dollars. As only a small number of survey participants reported this type of activity, the current share is likely to be an underestimate.

Repo rate analysis (Q1.6)

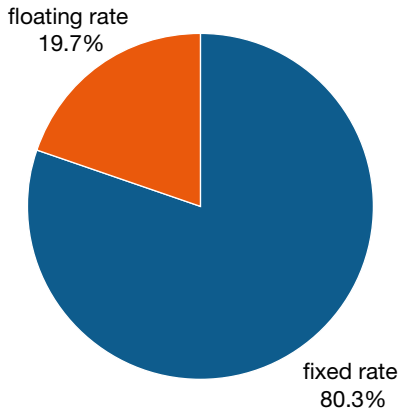
The growth in the share of floating-rate repo – which started in 2020 in response to central bank rate hikes – continued in the first-half of 2024, to reach 19.7% from 19.2%, despite most central banks pivoting to making rate cuts (see Table 2.15 and Figure 2.26).

Table 2.15 – Repo rate comparison in June 2024 (December 2023)

	main survey	ATS	tri-party
fixed rate	80.3% (80.8%)	97.5% (97.0%)	90.4% (87.9)%
floating rate	19.7% (19.2%)	2.5% (3.0%)	9.6% (12.1%)

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-dates surged to 70.2% from 56.2% of the repo books of the survey sample (see Table 2.16 and Figure 2.27). This was largely due to growth in positions with one day remaining to maturity and short-dates beyond one-week, at the expense of other short-dates (two-day to one-week), longer-term repo and forwards. Consequently, the weighted average residual term-to-maturity of outstanding repos on the books of the survey sample contracted to 26-58 days from 31-68 days in December.[8]

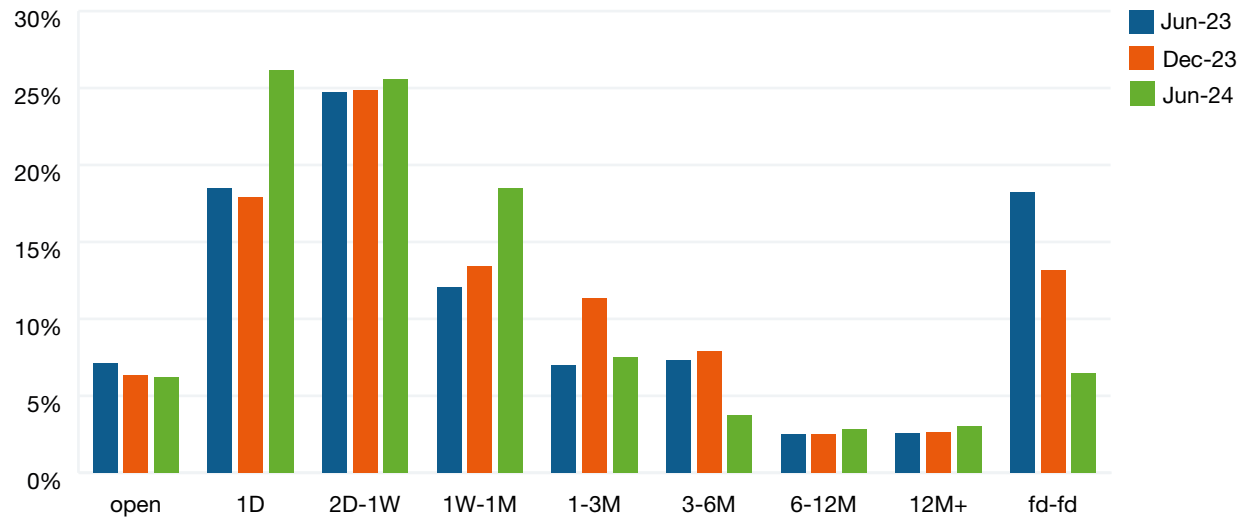
Table 2.16 – Maturity analysis

	June 2024	December 2023	June 2023
open	6.2%	6.3%	7.1%
1 day	26.1%%	17.9%	18.5%
2 days to 1 week	25.6%	24.9%	24.7%
1 week to 1 month	18.5%	13.4%	12.0%
>1 month to 3 months	7.5%	11.3%	7.0%
>3 months to 6 months	3.7%	7.9%	7.3%
>6 months to 12 months	2.8%	2.5%	2.5%
>12 months	3.0%	2.6%	2.5%
forward-start	6.5%	13.1%	18.3%

The continued drop in forward repo from the record share of 20.2% in December 2022 is likely to have reflected, in part, the recent change in the definition in the survey of forward repo to T+5 or later.[9] However, smaller forward positions might also have been the result of continued benign market conditions reducing the need to anticipate market tightening on regulatory reporting dates or futures delivery dates.

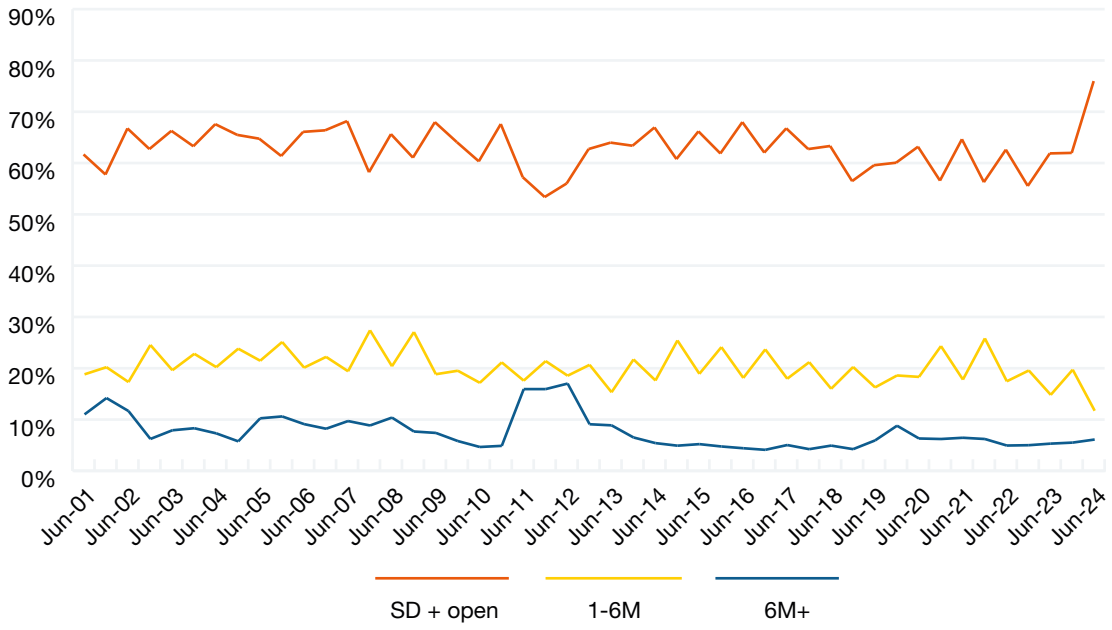
8 The lower end of the range assumes that all transactions have the minimum term in each maturity band: the upper end assumes the maximum and a term of 31 days for open repo.
9 Forward repos were formerly defined as transactions in which the initial exchange of cash and collateral takes place more than 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".

Figure 2.27 – Maturity analysis (main survey)



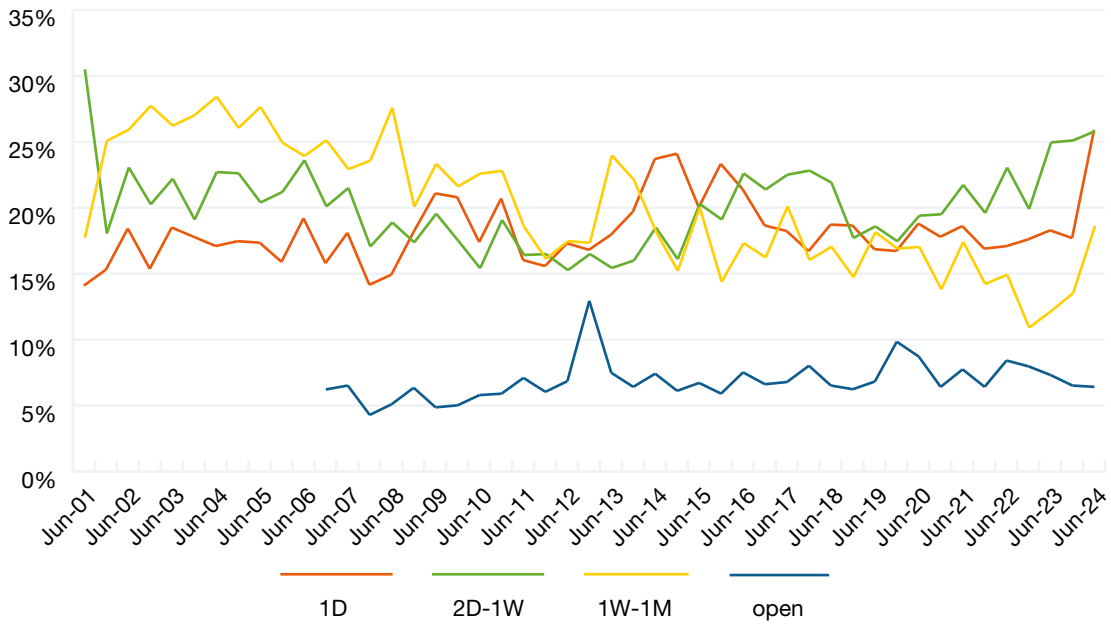
One to six-month repo positions held by the survey sample remained highly seasonal, peaking in December and troughing in June (see Figure 2.28). Significant activity in these residual maturity bands is driven by collateral swaps, which are exchanges of securities – often conducted by means of back-to-back repos and reverse repos – that are used to manage buffers of high-quality liquid assets (HQLA) required under the Liquidity Coverage Ratio (LCR) over end-year reporting dates.

Figure 2.28 – Maturity analysis: non-forward terms (main survey)



Within short-dates, there was a jump in the share of one-day positions (to 26.1% of the total survey size) and an acceleration in the growth of positions with between one week and one month remaining to maturity. The share of this latter residual maturity band reached 18.5% (see Figure 2.29).

Figure 2.29 – Maturity analysis: breakdown of short dates plus open (main survey)

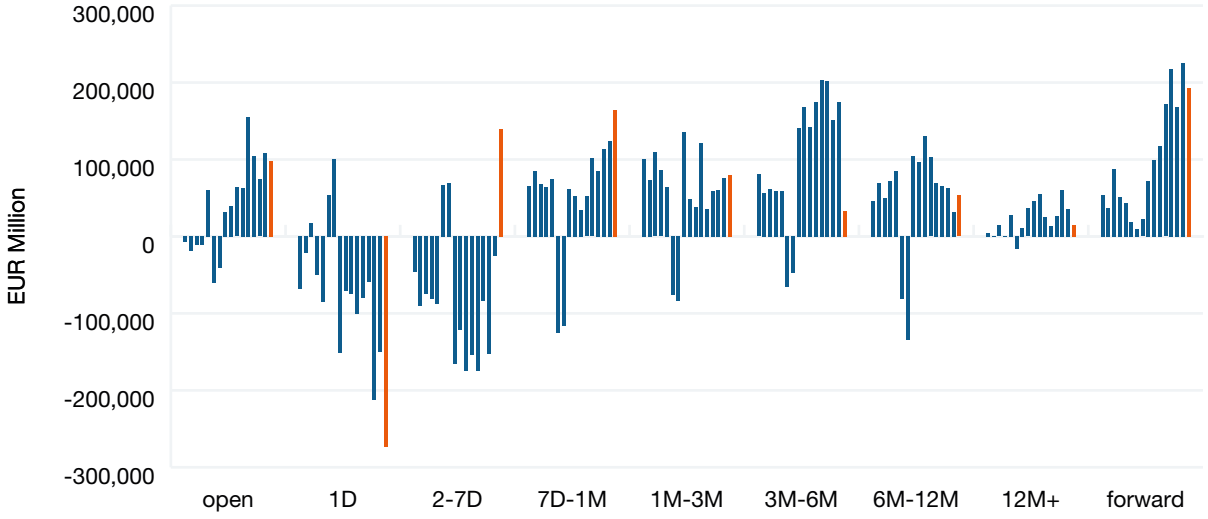


The negative funding gap of the survey sample fell back again, to 4.9% of the survey from 5.4% in December 2023.

There were large increases in the repo books of the survey sample of net borrowing of cash with one day remaining to maturity (see Figure 2.30). Indeed, outstanding net borrowing by the survey sample was entirely in the one-day residual maturity band, signalling an intensification of maturity transformation by the survey sample.

The principal channels for the net lending of cash and net borrowing of securities by the survey sample were open and forward repos and, to a lesser extent, repos in the one-week to three-month residual maturity band. The jump in net lending with a remaining term-to-maturity of two days to one week was highly unseasonal.

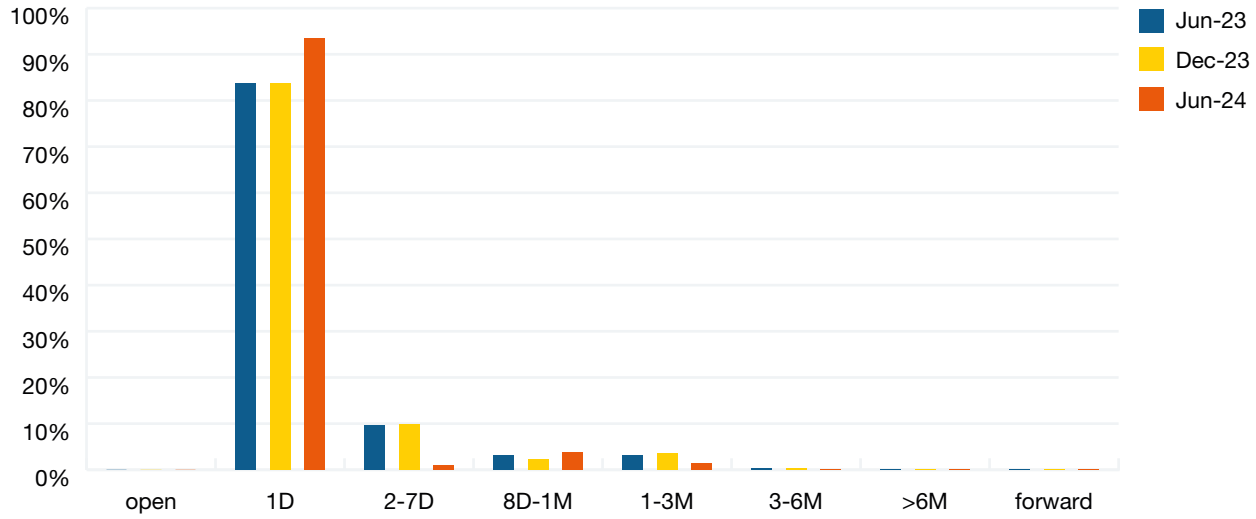
Figure 2.30 – Maturity analysis: maturity transformation profile – net reverse repo (main survey)



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 in the average term-to-maturity of ATS repo towards the very short term was dramatically reinforced in June by a rise in the share of one-day positions to 93.4% from 83.8% in December 2023 (see Figure 2.31). This was largely at the expense of the two-day to one-week and one-month to three-month residual maturity bands, in line with changes in the survey sample. Other short-dates increased share.

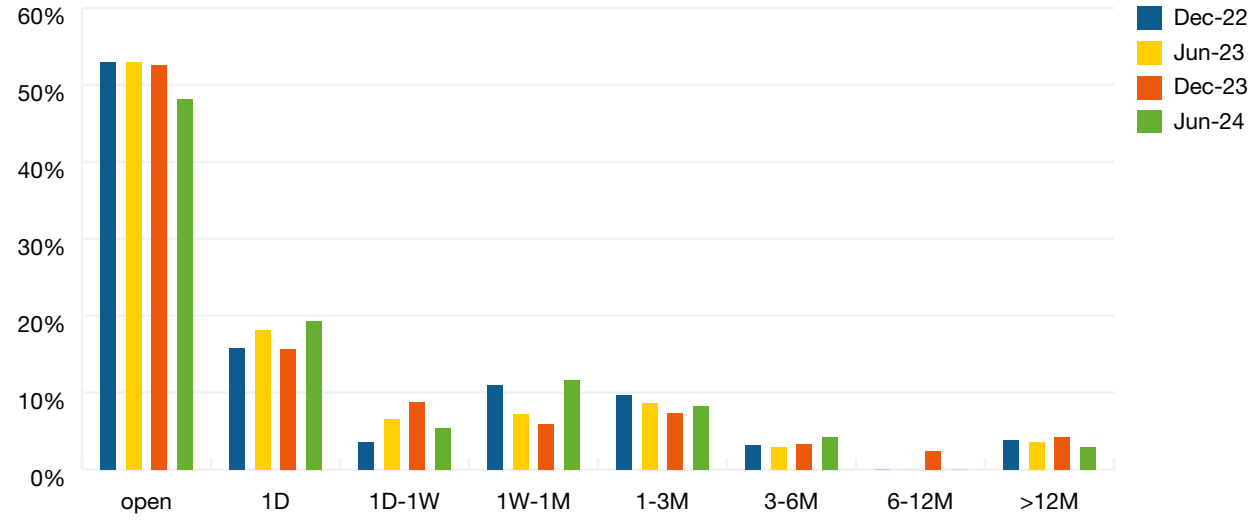
Figure 2.31 – Maturity analysis (ATS)



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

In tri-party repo, there was a very large drop in the share of open repo (to 36.5% from 53.3%) and – as in the survey and on ATS – there were relatively smaller positions with between two-day and one-week residual maturities. However, growth in the share of one-day positions in tri-party repo was weaker than in other market segments and their value of decreased.

Figure 2.32 – Maturity analysis (tri-party agents)



Sources: Clearstream, Euroclear, SIS

Table 2.17 – Maturity comparison in June 2024 (December 2023)

	main survey	ATS	tri-party
open	6.2% (6.3%)	n/a	36.5% (53.8%)
1 day	26.1% (17.9%)	93.4% (83.8%)	16.8% (16.4%)
2 days to 1 week	25.6% (24.9%)	0.9% (9.8%)	0.0% (10.5%)
1 week to 1 month	18.5% (13.4%)	3.8% (2.4%)	10.4% (6.2%)
>1 month to 3 months	7.5% (11.3%)	1.5% (3.6%)	6.8% (7.6%)
>3 months to 6 months	3.7% (7.9%)	0.2% (0.3%)	2.1% (1.9%)
>6 months to 12 months	2.8% (2.5%)	0.2% (0.0%)	0.0% (1.1%)
>12 months	3.0% (2.6%)	0.0% (0.0%)	1.6% (3.1%)
forward	6.5% (13.1%)	0.0% (0.0%)	

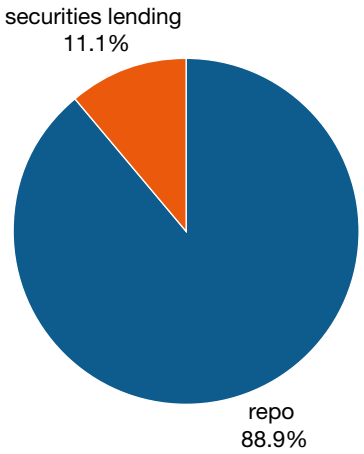
Sources: Clearstream, Euroclear, SIS, CME, Eurex, Euronext, SIX, TP ICAP

Product analysis (Q2)

The ICMA survey measures the securities lending conducted on repo desks as a share of all the business executed on these desks. The share of securities lending in the latest survey made a recovery to 11.1% from a record low of 9.5% in December 2023 (see Figure 2.33). The pattern of securities lending therefore continues to be atypical (its share has traditionally increased at end-year, probably as a way of reducing the balance sheet impact, at end-year, of lending by the use of non-cash collateral).

The share of equity lending grew to 4.4% from 1.6%. There was also more fixed-term lending (62.3% from 58.6%). And there was a shift in the share of lending from cross-border loans into and out of the eurozone (30.0% from 36.0%) into domestic business (30.0% from 19.7%).

Figure 2.33 – Product analysis



The survey sample was a net borrower of securities, except in eurozone equity. Net borrowing was most pronounced in cross-border eurozone fixed-income securities.

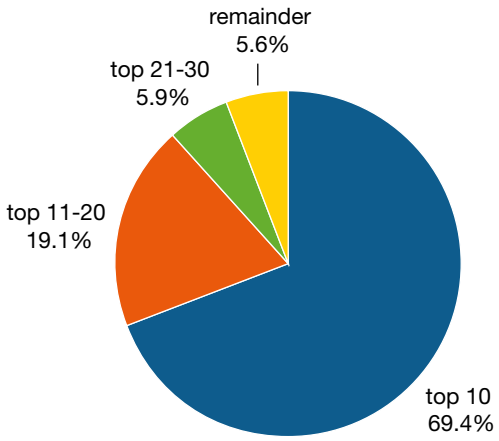
Concentration analysis

The top ten participants in the survey increased their share, largely at the expense of the third decile of the survey sample, who also lost some share to smaller firms (see Table 2.18 and Figure 2.34).

Table 2.18 – Concentration analysis

	June 2024	December 2023	June 2023
top 10	69.4%	68.5%	67.8%
top 20	88.5%	88.3%	86.7%
top 30	94.4%	95.0%	94.6%
other	5.6%	5.0%	5.4%

Figure 2.34 – Concentration analysis



The gain in market share by the third decile of the survey sample partially offset the increase in the share of the top decile, which marginally boosted effective competition across the survey sample. This was reflected in the slight reduction in the Herfindahl Index (see Table 2.19).

Table 2.19 – Herfindahl Index[10]

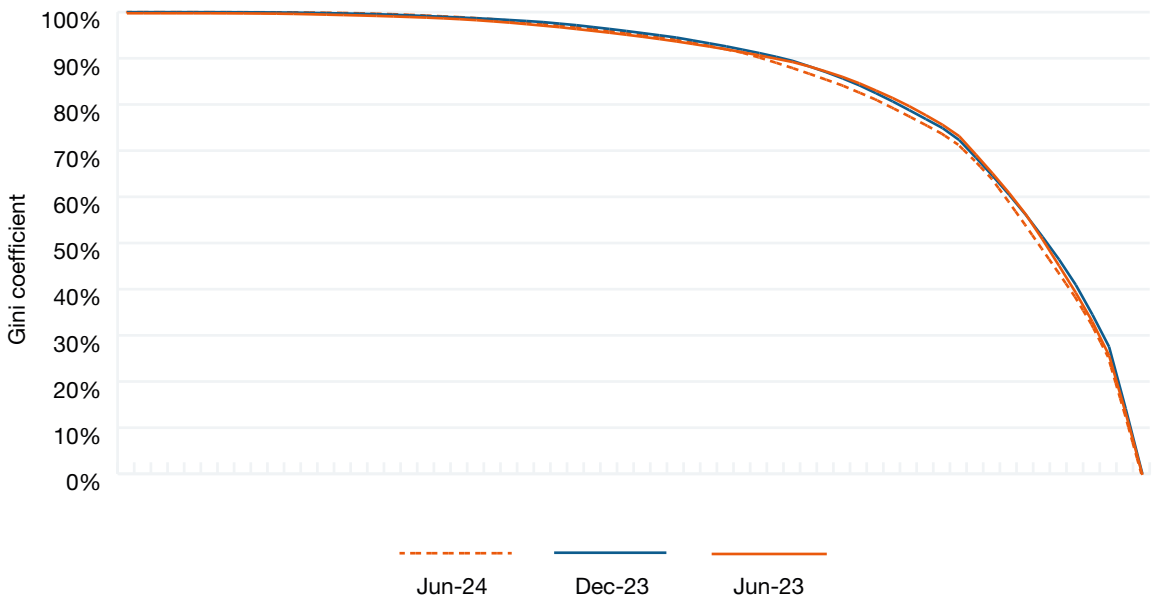
	index	numbers in survey
December 2003	0.045	76
June 2004	0.040	81
December 2004	0.047	76
June 2005	0.043	81
December 2005	0.043	80
June 2006	0.042	79
December 2006	0.050	74
June 2007	0.041	76
December 2007	0.040	68
June 2008	0.044	61
December 2008	0.049	61
June 2009	0.051	61
December 2009	0.065	59
June 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

10 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 participants. 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

The lower Herfindahl Index was reflected in the slight shift to the right in the Gini coefficient curve (see Figure 2.35).

Figure 2.35 – Cumulative distribution of market share



Chapter 3: Conclusion

The repo books of the survey sample reached a record level in June 2024, although there are further indications that the rate of growth has been slowing. This strong performance reflected the benign market conditions that continued to prevail in the first-half of 2024. There was an abundance of collateral, as a result of central banks unwinding their asset purchases and heavy issuance. There was also ample cash, notwithstanding reduced excess reserves at central banks. Repo activity, supported by adequate balance sheet capacity among dealers, was fueled by the growing collateral supply – the distribution of which relies on financing in the repo market – and buoyant secondary bond market trading in response to falling and expected falls in interest rates and bond yields.

Buoyant markets may also explain the increase in maturity transformation by the survey sample, with a major shift in repo positions towards a residual term-to-maturity of one-day.

The shift from QE to QT is gradually reducing the net reverse repo position of the survey sample (net cash lending and securities borrowing).

Adequate collateral supply may explain the ground that was lost by interdealer automatic trading systems (ATS), which specialise in trading specific collateral securities. There may also have been a need to rebalance collateral inventories. Slower growth in the use of ATS continues to hold back CCP-clearing (given that automatic electronic trading and central-clearing are tightly linked). However, deal-to-customer platforms continued to grow apace, largely on the back of hedge fund demand.

The reduction in central bank liquidity has underpinned the revival of cash-driven repo, including tri-party repo, which is recovering from the period of QE. An important element of tri-party repo is GC financing, although the growth in demand for these facilities may be slowing.

US Treasuries continue to play a greater role in the European repo market and captured a record share, as uncertainty around the timing, and sometimes the direction, of interest rate changes provided trading opportunities, current high yields attracted investors and increased issuance fueled repo trading. Some of the same factors helped UK gilts maintain their share of repo books. However, eurozone government securities lagged behind, as heavy supply sated the demand for those issues which have traditionally been seen as safe assets and political uncertainty around elections (and their fiscal implications) deterred investors. The survey sample switched back to the net lending of US Treasuries, probably reflecting the return of dealer balance sheet capacity back to Europe from the US and Asia.

The share of floating-rate repo did not fall in response to many central banks pivoting towards rate cuts.

Forward repo contracted again, as benign market conditions lessened the need to use forward transactions to anticipate the traditional seasonal tightening of market conditions at end-year.

About the Author

This report was compiled by Richard Comotto, who is Senior Consultant to the ICMA's European Repo and Collateral Council. He is also author of the *ICMA's Guide to Best Practice in the European Repo Market* and its *Repo FAQs*, Course Director of the ICMA Professional Repo Market and Collateral Management Course and of the ICMA-ISLA GMRA-GMSLA Workshop and author of the ICMA *SFTR Task Force's Repo Reporting Recommendations* and the ICMA CSDR *Cash Penalty Best Practice Recommendations and FAQs*. 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, June 12, 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 December 13, 2023).

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/buy-backs (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, June 12, 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, June 12, 2024, to a later date and all *forward repos and reverse repos* that are still outstanding as forward contracts at close on Wednesday, June 12, 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 before close of business on Wednesday, June 12, 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.

l) 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).

(1.1.2) 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 (1.2.2) --- see below. 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 tri-party 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 tri-party service and should be recorded in (1.1.3.5).

(1.2.1) This item includes all the transactions recorded in (1.1.3) plus 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 and eRepo, 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). This question asked 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, June 12, 2024, with a repurchase date on Thursday, June 13, 2024;
- overnight, tom/next, spot/next and corporate/next contracts transacted on Wednesday, June 12, 2024.

(1.7.1.2) 2–7 days – this means:

- all contracts transacted prior to Wednesday, June 12, 2024, with a repurchase date on Friday, June 14, 2024, or any day thereafter up to and including Wednesday, June 19, 2024;
- contracts transacted on Wednesday, June 12, 2024, with an original repurchase date on Friday, June 14, 2024, or any day thereafter up to and including Wednesday, June 19, 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, June 12, 2024, with a repurchase date on Thursday, June 20, 2024, or any day thereafter up to and including Friday, July 12, 2024;
- contracts transacted on Wednesday, June 12, 2024, with an original repurchase date on Thursday, June 20, 2024, or any day thereafter up to and including Friday, July 12, 2024 (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, June 12, 2024, with a repurchase date on Monday, July 15, 2024, or any day thereafter up to and including Thursday, September 12, 2024;
- contracts transacted on Wednesday, June 12, 2024, with an original repurchase date on Monday, July 15, 2024, or any day thereafter up to and including Thursday, September 12, 2024 (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, June 12, 2024, with a repurchase date on Friday, September 13, 2024, or any day thereafter up to and including Thursday, December 12, 2024;
- contracts transacted on Wednesday, June 12, 2024, with an original repurchase date on Friday, September 13, 2024, or any day thereafter up to and including Thursday, December 12, 2024 (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, June 12, 2024, with a repurchase date on Friday, December 13, 2024, or any day thereafter up to and including Thursday, June 12, 2025;
- contracts transacted on Wednesday, June 12, 2024, with an original repurchase date on Friday, December 13, 2024, or any day thereafter up to and including Thursday, June 12, 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, June 12, 2024, with a repurchase date on Friday, June 13, 2025, or any day thereafter;
- contracts transacted on Wednesday, June 12, 2024, with an original repurchase date on or after Friday, June 13, 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, June 19, 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 December 13, 2023 (the day after the previous survey date), to and including June 12, 2024 (the latest survey date). In other words, it asks for the turnover 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 number of individual transactions with a transaction date on or after December 13, 2023 (the day after the previous survey date), to and including June 12, 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 reposurvey@icmagroup.org.

Appendix B: Survey Participants

List of respondents	Jun-14	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
ABN Amro Bank	x	x	x	x																	
Allied Irish Banks	x	x	x	x	x	x	x	x	x												
AXA Bank Europe	x	x	x	x	x	x	x														
Banc Sabadell	x	x	x	x	x	x	x		x												
Banca d'Intermediazione Mobiliare (IMI)	x	x	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	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	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	x	x	x	x	x	x	x	x
Bank of Ireland	x	x	x	x	x	x	x	x	x	x	x	x	x								
Bank Przemyslowo-Handlowy SA																					
Landesbank Berlin																					
Banque de Luxembourg	x	x	x	x	x	x	x	x	x	x	x	x	x	x	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	x	x
Barclays Capital	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Bayerische Landesbank	x	x	x	x	x	x	x	x	x		x	x	x	x	x						
BBVA	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
BHF-Bank																					
BHF-Bank International																					
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	x
Caixa d'Estalvis de Catalunya	x		x	x																	
Bankia SA (formerly Caja de Ahorros y Monte de Piedad de Madrid (Caja Madrid))	x	x	x	x	x	x	x	x	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	x
Citigroup	x	x	x	x	x	x	x	x	x	x	x	x	x	x	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				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	x
Credit Suisse Securities (Europe) Ltd	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x		
Danske Bank	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Daiwa Securities SMBC Europe	x	x	x	x																	

List of respondents	Jun-14	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
Dekabank Deutsche Girozentrale	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Deutsche Bank	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Deutsche Postbank	x	x	x	x	x	x	x	x	x												
Belfius Bank (formerly Dexia)	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Banque Internationale Luxembourg (formerly Dexia BIL)						x	x		x			x									
Dexia Kommunal Bank Deutschland																					
DNB Bank ASA				x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
DZ Bank	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
EFG Eurobank Ergasias	x	x		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Erste Bank der Oesterreichischen Sparkassen	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Euroclear Bank	x	x	x	x	x	x	x	x	x	x			x	x	x	x	x	x	x	x	x
European Investment Bank														x	x	x	x	x	x	x	x
Hypothekenbank Frankfurt International (formerly Eurohypo Europäische Hypothekenbank)	x																				
Fortis Bank	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Goldman Sachs	x	x	x	x	x	x	x	x	x	x	x			x	x	x	x	x	x	x	x
HSBC HSBC Athens HSBC France	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
HSH Nordbank				x																	
Unicredit Bank Germany (Bayerische Hypo-und-Vereinsbank)	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
ICBC Standard Bank				x	x	x															
ING Bank	x	x	x	x	x	x															
Intesa SanPaolo	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Jefferies International	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
JP Morgan	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
KBC	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
KfW	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Kingdom of Belgium Federal Public Service Debt Agency	x	x	x	x	x	x	x	x	x	x			x								
Landesbank Baden-Württemberg, Stuttgart	x	x	x	x	x		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Landesbank Hessen-Thüringen -Girozentrale (Helaba)	x	x	x	x	x	x		x													
Lloyds Bank Commercial Banking										x	x	x	x	x	x	x	x	x	x	x	x
Lloyds Bank Plc							x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Macquarie Bank	x	x	x	x	x		x	x	x	x	x	x	x	x	x			x			x
Bank of America Merrill Lynch	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Mitsubishi Securities International	x	x	x	x		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Mizuho International	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Morgan Stanley	x	x	x	x	x		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
National Australia Bank				x																	
National Bank of Greece					x	x															

List of respondents	Jun-14	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
Newedge																					
Nomura International	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Norddeutsche Landesbank Girozentrale	x	x	x	x	x	x	x	x	x	x	x	x	x	x							
Nordea Markets	x	x	x		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Norinchukin Bank	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Nova Ljubljanska Banka d.d.		x		x	x	x	x	x		x	x	x	x	x	x	x	x	x			
Nykredit Bank A/S												x	x	x	x	x	x	x	x	x	x
Piraeus Bank				x	x	x		x													
Post Italiane																			x	x	x
Rabobank	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Royal Bank of Canada	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
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								x													
Société Générale	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Standard Chartered												x	x	x	x	x	x	x	x	x	x
Toronto Dominion Bank		x	x	x	x	x	x	x	x	x		x	x	x	x	x	x	x	x	x	x
UBS	x	x	x	x	x	x	x	x	x	x	x	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	x		
Unicredit Bank Spa								x		x	x	x	x	x	x	x	x	x	x	x	x
Westdeutsche Landesbank Girozentrale																					
	64	64	64	70	66	65	64	64	62	59	56	60	61	60	59	56	56	61	62	60	61

Appendix C: Summary Of Survey Results

	Dec-21	Jun-22	Dec-22	Jun-23	Dec-23	Jun-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	16.5%	16.3%	15.1%	14.4%	12.9%	12.8%
• cross-border in (other) **eurozone countries**	13.1%	12.5%	12.8%	15.1%	11.6%	12.1%
• cross-border in **non-eurozone countries**	33.5%	35.7%	35.6%	34.2%	34.5%	34.8%
through **voice-brokers**						
• in the **same country** as you	4.3%	2.9%	3.3%	4.0%	4.6%	6.2%
• cross-border in (other) **eurozone** countries	3.9%	3.5%	3.8%	4.1%	4.1%	3.6%
• cross-border in **non-eurozone** countries	1.8%	1.7%	1.9%	1.9%	2.0%	2.2%
on **ATSs** with counterparties						
• in the **same country** as you	5.1%	3.6%	3.6%	3.1%	4.6%	4.2%
• cross-border in (other) **eurozone** countries	2.6%	2.7%	2.9%	3.2%	3.2%	3.1%
• cross border-border in **non-eurozone** countries	3.0%	3.7%	2.9%	2.7%	4.7%	2.4%
• anonymously across a GC financing system	0.7%	0.8%	0.8%	1.1%	1.7%	2.7%
• anonymously across a central clearing counterparty but not GC financing	15.3%	16.6%	17.3%	16.2%	16.0%	15.9%
• total through a central clearing counterparty	28.8%	27.0%	23.8%	25.7%	23.4%	22.0%
• transacted across any electronic system	23.9%	24.4%	23.2%	19.6%	29.1%	29.5%
1.2 How much of the cash is denominated in:						
• EUR	56.8%	54.7%	56.4%	58.8%	54.4%	53.9%
• GBP	15.7%	15.6%	14.8%	12.1%	12.8%	13.6%
• USD	19.1%	20.3%	19.4%	20.8%	22.2%	23.3%

	Dec-21	Jun-22	Dec-22	Jun-23	Dec-23	Jun-24
• SEK, DKK	1.5%	1.3%	1.2%	1.1%	1.2%	1.0%
• JPY	4.7%	5.7%	5.6%	5.1%	7.4%	5.4%
• CHF	0.1%	0.0%	0.2%	0.2%	0.2%	0.3%
• other Asian and Pacific currencies	0.9%	1.1%	1.3%	0.7%	0.8%	1.1%
• other currencies	1.2%	1.4%	1.1%	1.2%	1.0%	1.3%
1.3 How much is cross-currency?	1.9%	1.8%	2.1%	1.6%	1.6%	1.7%
1.4 How much is:						
• classic repo	93.2%	93.8%	94.0%	93.4%	92.6%	95.8%
• documented sell/buy-backs	6.4%	5.7%	5.9%	6.5%	7.3%	4.1%
• undocumented sell/buy-backs	0.4%	0.4%	0.1%	0.1%	0.0%	0.0%
1.5 How much is:						
• fixed rate	89.0%	88.0%	87.1%	85.1%	80.8%	80.3%
• floating rate	11.0%	12.0%	12.9%	14.9%	19.2%	19.7%
• 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**	16.6%	17.3%	17.8%	18.5%	17.9%	26.1%
• **2 - 7days**	18.6%	22.8%	19.7%	24.7%	24.9%	25.6%
• more than **7 days** but no more than **1 month**	13.7%	14.8%	10.8%	12.0%	13.4%	18.5%
• more than **1 month** but no more than **3 months**	16.7%	9.5%	11.9%	7.0%	11.3%	7.5%
• more than **3 months** but no more than **6 months**	7.9%	7.4%	7.1%	7.3%	7.9%	3.7%
• more than **6 months**	3.2%	2.4%	2.2%	2.5%	2.5%	2.8%
• more than **12 months**	2.7%	2.2%	2.5%	2.5%	2.6%	3.0%
• **forward-forward repos**	14.5%	1.3%	20.2%	18.3%	13.1%	6.5%
• **open**	6.1%	8.2%	7.8%	7.1%	6.3%	6.2%
1.7 How much is tri-party repo:	82.1%	75.9%	75.7%	72.7%	76.3%	79.4%
• for **fixed terms to maturity**	6.8%	13.3%	12.6%	12.5%	5.1%	5.4%
• on an **open** basis	11.1%	10.8%	11.7%	14.8%	18.7%	15.2%
GCF	8.6%	9.0%	6.5%	8.0%	8.8%	9.8%
1.8 How much is against collateral issued in:						
Austria						
• by the central government	0.9%	1.0%	0.8%	0.8%	0.8%	0.8%
• by other issuers	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%

	Dec-21	Jun-22	Dec-22	Jun-23	Dec-23	Jun-24
Belgium						
• by the central government	2.9%	2.6%	2.6%	2.9%	2.2%	2.3%
• by other issuers	0.4%	0.5%	0.5%	0.6%	0.6%	0.9%
Denmark						
• by the central government	0.2%	0.3%	0.2%	0.2%	0.1%	0.1%
• by other issuers	0.6%	0.6%	0.7%	0.8%	0.9%	0.7%
Finland						
• by the central government	0.4%	0.4%	0.5%	0.5%	0.4%	0.4%
• by other issuers	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%
France						
• by the central government	13.2%	12.8%	12.5%	13.8%	11.5%	10.4%
• by other issuers	0.6%	0.6%	0.6%	0.7%	0.8%	0.7%
Germany						
• by the central government	14.3%	14.5%	15.8%	13.4%	13.2%	10.4%
pfandbrief	0.1%	0.5%	0.6%	0.0%	0.1%	1.6%
• by other issuers	1.4%	0.6%	0.8%	1.1%	1.3%	1.3%
Greece						
• by the central government	0.2%	0.1%	0.1%	0.1%	0.1%	0.1%
• by other issuers	0.1%	0.0%	0.0%	0.1%	0.1%	0.1%
Ireland						
• by the central government	0.4%	0.3%	0.3%	0.3%	0.3%	0.2%
• by other issuers	0.3%	0.3%	0.3%	0.3%	0.3%	0.2%
Italy						
• by the central government	11.5%	11.6%	12.0%	13.2%	12.3%	12.5%
• by other issuers	0.4%	0.4%	0.2%	0.5%	0.7%	0.8%
Luxembourg						
• by the central government	0.0%	0.0%	0.1%	0.1%	0.0%	0.0%
• by other issuers	0.3%	0.3%	0.3%	0.2%	0.3%	0.2%
Netherlands						
• by the central government	1.3%	1.2%	1.0%	1.3%	1.2%	1.3%
• by other issuers	0.2%	0.2%	0.2%	0.2%	0.3%	0.3%
Portugal						
• by the central government	0.5%	0.5%	0.4%	0.4%	0.4%	0.3%
• by other issuers	0.1%	0.0%	0.1%	0.1%	0.1%	0.2%
Spain						
• by the central government	5.2%	4.8%	4.8%	5.6%	4.6%	4.8%
• by other issuers	0.7%	0.3%	0.4%	0.6%	0.6%	0.6%

	Dec-21	Jun-22	Dec-22	Jun-23	Dec-23	Jun-24
Sweden						
• by the central government	0.5%	0.4%	0.3%	0.3%	0.3%	0.2%
• by other issuers	0.3%	0.3%	0.2%	0.3%	0.3%	0.3%
UK						
• by the central government	14.1%	13.9%	12.9%	11.4%	11.2%	11.8%
• by other issuers	1.3%	1.3%	1.4%	1.5%	1.4%	1.0%
US Treasury	10.9%	9.4%	8.4%	8.0%	10.1%	15.4%
US other issuers	2.2%	2.2%	2.2%	2.2%	2.5%	3.5%
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%	0.1%	15.4%
• by other issuers	0.0%	0.1%	0.0%	0.0%	0.1%	3.5%
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%

	Dec-21	Jun-22	Dec-22	Jun-23	Dec-23	Jun-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%	0.1%	0.0%	0.0%	0.1%	0.1%
Other EU members by other issuers	0.1%	0.0%	0.0%	0.0%	0.1%	0.3%
• by official international financial institutions	0.4%	0.5%	0.5%	0.6%	0.6%	0.5%
Japan						
• Japanese government	3.9%	4.0%	3.9%	3.8%	5.7%	4.8%
• Other Japanese issuers	1.1%	1.3%	1.3%	1.4%	1.5%	0.1%
Other Asian & Pacific OECD countries in the form of fixed income securities, except eurobonds	0.3%	0.2%	0.8%	0.3%	0.4%	0.7%
Other OECD countries in the form of fixed income securities, except eurobonds	3.4%	6.6%	6.2%	6.1%	6.2%	2.3%
Other OECD						
non-OECD EMEA	0.7%	0.7%	0.7%	0.5%	0.5%	0.6%
non-OECD Asian & Pacific	0.5%	0.5%	0.5%	0.3%	0.4%	0.3%
non-OECD Latin America	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%
eurobonds issued by European entities	0.8%	0.7%	0.7%	0.9%	0.9%	1.0%
eurobonds issued by US entities	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%
eurobonds issued by Asian & Pacific entities	0.3%	0.4%	0.4%	0.4%	0.5%	0.3%
eurobonds issued by other entities	0.3%	0.4%	0.4%	0.6%	0.4%	0.6%
equity	0.4%	0.5%	0.3%	0.3%	0.2%	0.2%
collateral of unknown origin or type	0.1%	0.0%	0.5%	0.6%	0.8%	0.5%
collateral in tri-party which cannot be attributed to a country or issuer	1.4%	1.5%	1.6%	1.9%	2.1%	3.0%
EU issues	0.3%	0.1%	0.2%	0.2%	0.3%	0.4%
total gross values of repo & reverse repo with APAC	3.9%	4.7%	6.8%	4.7%	5.4%	4.2%

	Dec-21	Jun-22	Dec-22	Jun-23	Dec-23	Jun-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	22.1%	25.8%	24.8%	17.7%	19.6%	29.9%
• in equity	0.0%	0.1%	0.0%	0.1%	0.1%	0.1%
• cross-border in (other) **eurozone** countries						
• in fixed income	26.3%	30.7%	25.1%	35.6%	35.5%	32.2%
• in equity	0.3%	0.3%	0.2%	0.3%	0.5%	1.8%
• cross-border in **non-eurozone** countries						
• in fixed income	50.8%	42.5%	49.4%	45.8%	43.3%	33.5%
• in equity	0.4%	0.6%	0.4%	0.5%	1.0%	2.5%
for which the term to maturity is						
fixed	71.6%	68.0%	70.6%	73.7%	58.6%	62.3%
open	28.4%	32.0%	29.4%	26.3%	41.4%	37.7%
Number of GMRAs	84.9%	92.0%	82.9%	86.9%	88.1%	87.9%

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