About ASIFMA and ICMA

Asia Securities Industry and Financial Markets Association (ASIFMA)

ASIFMA is an independent, regional trade association with over 150-member firms comprising a diverse range of leading financial institutions from both the buy and sell side, including banks, asset managers, law firms and market infrastructure service providers. Together, we harness the shared interests of the financial industry to promote the development of liquid, deep and broad capital markets in Asia. ASIFMA advocates stable, innovative and competitive Asian capital markets that are necessary to support the region’s economic growth. We drive consensus, advocate solutions and effect change around key issues through the collective strength and clarity of one industry voice. Our many initiatives include consultations with regulators and exchanges, development of uniform industry standards, advocacy for enhanced markets through policy papers, and lowering the cost of doing business in the region. Through the GFMA alliance with SIFMA in the United States and AFME in Europe, ASIFMA also provides insights on global best practices and standards to benefit the region.

www.asifma.org

International Capital Market Association (ICMA)

ICMA promotes well-functioning cross-border capital markets, which are essential to fund sustainable economic growth. It is a not-for-profit membership association with offices in Zurich, London, Paris, Brussels and Hong Kong, serving around 615 member firms in 65 jurisdictions. Among its members are private and official sector issuers, banks, broker-dealers, asset managers, pension funds, insurance companies, market infrastructure providers, central banks & law firms. It provides industry-driven standards and recommendations, prioritising four core fixed income market areas: primary, secondary, repo & collateral and sustainable finance. ICMA works with regulatory and governmental authorities, helping to ensure that financial regulation supports stable and efficient capital markets.

Since the early 1990’s, ICMA has played a significant role in promoting the interests and activities of the international repo market, and of the product itself. The European Repo and Collateral Council (ERCC), a special interest group established under the auspices of ICMA, represents the major firms active in Europe’s cross-border repo markets.

www.icmagroup.org
The survey

ICMA’s European Repo and Collateral Council (ERCC) and ASIFMA’s Secured Funding Markets Committee have been cooperating to replicate the ICMA’s survey of the European repo market in the Asia-Pacific (APAC) region.

Co-operation started in June 2016 with the addition of a number of questions in the ICMA’s European survey to provide greater granularity about APAC repo (as defined below) executed with counterparties in Europe.

In December 2016, a pilot survey of repo desks located in the APAC region was conducted using a questionnaire based on that used in the European survey.

The first regular APAC repo market survey (which is referred to as the ‘Asian’ repo market survey) was conducted in June 2020. The latest survey was conducted on June 14, 2023, to coincide with the ICMA’s mid-year semi-annual European survey.

The participants in the joint Asian survey are mostly international banks. Consequently, the business encompassed tends to be cross-border rather than domestic repo.

Methodology of the Asian survey

The Asian survey broadly follows the methodology of the European survey, except for a more relaxed definition of repo:

- APAC repo has been defined, for the purposes of the survey, as repos (1) involving at least one party dealing from a location in the APAC region in any currency and/or against any collateral or (2) between parties located anywhere but in an APAC currency and/or against collateral issued in the APAC region.
- Respondents were asked to identify the location of repo desks executing transactions rather than the location where the transactions were booked. However, this has been challenging for many banks.
- Repo has been defined to include instruments that do not conform to the standard definition of repo as an instrument that transfers title to collateral (e.g. Chinese ‘pledged repo’) or that are hybrids with securities lending (Japanese ‘gentan’).
- The European and Asian surveys analyse the value of repos and reverse repos outstanding at close of business on the survey date rather than turnover over a period between two dates. This snapshot of the market at one point in time understates the volume of short-term transactions, given that many of these run off between survey dates, but provides a meaningful picture of exposures.
- The results are not adjusted for double-counting where the same transaction is reported by two survey respondents.
- The results do not include repos by central banks that are part of their open market operations.

A key difference with the European survey has been to split the Asian survey into two parallel surveys, one for trading in Japan and the other for trading elsewhere in the APAC region. Regrettably, in June 2023, there were again insufficient contributions to the survey of Japanese repo for this part of the survey to be included in this year’s report.
New data about APAC repo in the European survey (June 2023)

- APAC repo continued to account for a small, although not insignificant, share of the European market but there was no sign of long-term growth.
- The European repo market was again a net borrower of collateral issued in the APAC region, in particular, of JGBs.

The outstanding value of business by the European survey sample with APAC counterparties grew in line with the rest of the survey to reach EUR 482 million from EUR 435 million in June 2022 (+10.8%). Consequently, APAC counterparties accounted for an unchanged 4.7% of total outstanding value of repos and reverse repos reported by the European survey.

The European survey sample continued to be net cash lenders to and net collateral borrowers from APAC counterparties. There was little change in the net position. Gross cash lending to APAC counterparties was equivalent to 5.6% of the European survey, compared with 5.5% in June 2022, and gross cash borrowing was 3.8% compared with 3.7%.

The share of APAC currencies in the European survey dropped sharply to a record low of 5.8% from 6.8% of total outstanding repos and reverse repos traded by the European survey sample. Japanese yen fell to 5.1% from 5.7% and other APAC currencies to 0.7% from 1.1%. The European survey sample continued to run a net reverse repo position for both yen and other APAC currencies that was little changed, with the shares of gross reverse repo at 57.6% and 59.1%, respectively, compared with 59.0% and 61.0% in June 2022.

The overall share of APAC collateral repoed out and reversed in by the European survey sample was down slightly at 6.2% compared with 6.4% in June 2022. Japanese collateral accounted for 5.2% and JGBs for 3.8% of the outstanding value of the European survey (down from 5.3% and 4.0%, respectively, in 2022). In addition, 0.3% of collateral in the European survey was issued in ‘other OECD APAC’ countries; 0.3% was non-OECD APAC collateral; and 0.4% was in APAC international bonds (traditionally known as ‘eurobonds’), similar shares to those in the June 2022 survey.

New data on onshore business and ASIFMA members’ priorities

This report includes, for the first time, a snapshot of the onshore repo markets in China and India. These two economies are the second and fourth largest economies in the world and the two most populous countries.

ASIFMA also asked its members their priorities in the markets they are currently operating in and to identify which new APAC markets are on their radar.

Survey results of the June 2023 APAC (ex-Japan) survey

Summary

- The survey suggested modest growth in the outstanding value of the ex-Japan APAC repo market but declining turnover, which implies more longer-term transactions.
- The bulk of business continued to be directly negotiated with counterparties but electronic trading increased its share, albeit from a low base. The survey sample ran net repo positions in electronic and voice-brokered trades and a net reverse repo position in directly-negotiated trades.
- CCP-clearing played a small and diminishing role. Repos tended to be cleared on a CCP after having been negotiated directly between counterparties rather than on an ATS (that is, repo tended to be cleared by post-trade registration).
- Tri-party repo continued to fade.
- Cross-border business with APAC and non-European counterparties increased its share of the survey, whereas the shares of business with counterparties in Europe, in euros and in eurozone collateral continued to dwindle.
• There was a shift in the allocation of collateral into JGBs and some other APAC securities, although US Treasuries and international securities (eurobonds) retained very significant shares. The survey sample was a net lender of JGBs.

• Government securities remained the principal type of collateral. The increase in JGBs helped to boost the share of government securities to two-thirds of the size of the survey.

• The US dollar remained the dominant currency in the survey. The Japanese yen took second place from the Australian dollar, reflecting the shift in collateral composition.

• As in the European market, floating-rate repo increased its share, reflecting rising interest rates.

• There was a fall in the share of short-dates in favour of longer-term, open and forward repos. The most active maturity band continued to be one week to one month.

• Transactions overwhelmingly remained in the form of repurchase transactions.

• Reflecting the scale of use of repurchase transactions, most reported transactions continued to be documented under the GMRA.

Overview

The ex-Japan APAC survey reported the outstanding value of repos and reverse repos on 14 June 2023 on the books of the survey sample as USD 269.1 billion and average daily turnover between 9 June 2022 and 14 June 2023 as USD 12 billion. There were almost 231,700 transactions over the year, of which, 53.0% were reverse repo. Repo were, on average, smaller than reverse repo.

The size of the survey in June 2023 was much lower than in June 2022, when outstanding value was USD 310.0 billion, average daily turnover was USD 43 billion and the number of transactions was almost 231,700 (implying contractions of -13.2%, -51.3% and -30.4, respectively). However, the change in size reflected changes in the composition of the survey sample, in particular, the loss of two international banks from the survey sample and changes in regional bank participation.

The impact of changes in the composition of the survey sample can be seen by recalculating the survey results for a sample of banks who participated in both the 2022 and 2023 surveys. For this constant sample --- which is composed only of international banks --- there was increase of +6.4% in the outstanding value (rather than a decrease of -13.2%) but a similar fall of -54.0% in turnover (compared with -51.3%) and a slightly larger decline of -32.2% in the number of transactions (as opposed to -30.4%).

In order to ensure that changes in the results of the survey over 2022/23 are not distorted by changes in the composition of the survey, this report only analyses changes in the positions of the constant survey sample on the survey dates.

Growth in outstanding value but decline in turnover would suggest a lengthening of the average remaining term-to-maturity. There is some evidence of more term business in the maturity analysis (see below).

The survey sample continued to run a net reverse repo position in terms of total outstanding value on survey dates (that is, net lending of cash to and therefore net borrowing of securities from the rest of the market) but by a smaller margin than in June 2022. Gross repo expanded in value by 15.2%, while there was little change in gross reverse repo, with the result that the share of reverse repo increased to 43.4% from 40.1%.

In terms of the value of turnover, the survey sample moved to parity between the value of new gross repo and reverse repos during 2022/23 compared with a net repo outflow during 2021/22 (when gross repo was 57.9%).

In terms of the number of transactions between June 2022 and June 2023, the survey sample increased the flow of net reverse repo to the rest of the market (gross repo increased to 58.5% during 2022/23 from 55.6% during 2021/22). This is consistent with repo being, on average, smaller than reverse repo.
Geographical analysis

There was a rebound in the share of cross-border business in the ex-Japan APAC survey, to 83.8% from 76.5% of outstanding value in June 2022. However, this growth was mainly in the share of business with APAC counterparties (to 39.6% from 34.0%) and with non-European non-APAC counterparties (to 26.0% from 20.3%). In contrast, the share of cross-border trading with Europe continued to contract, falling to 18.2% from 22.6%.

Figure 1 – Trading analysis – domestic v cross-border

The change in the size of many positions reversed direction in the latest survey. The share on 14 June 2023 of the total outstanding value of business by the survey sample with Australian counterparties fell back (to 7.3% from 10.0% in June 2022) but the overall share of business with APAC counterparties increased (to 53.9% from 52.9%) because of a recovery in trading by the survey sample with counterparties in China (to 11.0% from 7.3%) and Singapore (to 12.2% from 11.0%) and further growth in the share of business with Hong Kong (to 13.1% from 11.1%).

Outside APAC, the share of business by the survey sample with counterparties in the US recovered (to 10.0% from 4.5%), but especially with ‘other’ non-APAC counterparties (to 14.9% from 4.5%). On the other hand, the share of business with counterparties in Europe continued to shrink rapidly (to 21.2% from 32.8% in June 2022).

The survey sample increased its net repo position with Australia and with non-APAC countries outside the US and Europe. It switched to a large net repo position with the US. But business with China flipped the other way, to net reverse repo. Net reverse repo positions with Hong Kong and Singapore expanded but contracted with ‘other’ APAC countries. Business with Europe moved from net reverse repo to parity. Consequently, the overall pattern was cash borrowing from Australia, the US and regions outside the US, Europe and APAC and cash lending to APAC excluding Australia.
Figure 2 – Geographical analysis

Trading analysis

The largest share of the positions reported in the ex-Japan APAC survey continued to be result of trading directly between counterparties (86.4% compared with 86.7% in June 2022).

The share of voice-brokers fell back to 7.6% from 12.5%, reflecting dramatic growth in automatic electronic trading. The share of these central limit order books or CLOB-based platforms expanded to 6.0% from 0.8% in June 2022. However, automatic electronic trading was limited to cross-border trading with regions outside APAC or Europe, whereas, in the 2022 survey, there was also automatic trading cross-border with other APAC countries. The share of automated electronic trading (typically using request-for-quotes or RFQ trading protocols) grew to 5.5% from 1.5% (note that automated electronic trading was reported as a sub-set of direct trading).

The share of CCP-cleared repos fell to 6.6% from 8.2% in June 2022.

As no outstanding business was reported as having been negotiated both electronically and anonymously (that is, on a platform connected to a CCP), most CCP-cleared business would again seem to have been negotiated directly between parties and registered with a CCP post-trade.

The net reverse repo position of the survey sample with counterparties in the same country recovered dramatically in June 2023 (gross reverse repo jumped to 79.2% of the outstanding value of domestic trades from 65.3% in June 2022). Cross-border business with other APAC counterparties continued to be net reverse repo but cross-border business with Europe switched from net reverse repo to net repo (gross repo increased to 53.0% from 48.3%), while there was an increase in the net repo position of cross-border business with other non-APAC non-European counterparties (gross repo increased to 67.9% from 51.3%). The fact that the survey sample had a net repo position in cross-border business with Europe in the trading analysis but a matched position in the geographical analysis is an error in reporting but only of about USD 2 billion.

The survey sample continued to run a net reverse repo position in transactions negotiated directly with the rest of the market (gross reverse repo was virtually unchanged at 61.9%). In contrast, voice-brokered and particularly automatic electronic trading were channels for net repo. The net repo position taken through voice-brokers expanded (gross repo jumped to 64.2% from 50.1% last year), as did business transacted across automatic platforms (gross repo expanded to 93.5% from 85.3%). This suggests the classic repo market matched-book configuration, with dealers borrowing cash through electronic trading and voice-brokers and lending direct to customers.
Currency analysis

The most traded currency reported in the ex-Japan APAC survey remained the US dollar (although its share fell to 53.2% from 57.1% in June 2022). The Australian dollar gave up second place as its share contracted to 13.4% from 21.4%. Its place was taken by the Japanese yen, which saw its share surge to 23.4% from 8.2%. This helped the share of all APAC currencies to increase further (to 43.7% from 35.7%). The share of the euro continued its decline (to 1.8% from 4.9%).

The survey sample continued to run a net repo position in APAC currencies other than the yuan and Hong Kong and Singapore dollars (gross repo for all APAC currencies was little changed at 56.2%) but net reverse repo positions in non-APAC currencies (increasing in the case of the euro but decreasing in the case of the US dollar and other non-APAC currencies).

The net repo position of the ex-Japan APAC survey sample in APAC currencies is consistent with the net reverse repo position run by the European repo survey sample in the same currencies (gross reverse repo in APAC currencies in Europe increased to 59.1% from 56.8% in June 2022).

The share of cross-currency repo in the survey sample grew further, to 13.1% from 12.6%, and continued to be a net reverse repo position, albeit smaller than in June 2022 (the share of gross reverse repo increased to 62.8% from 60.94%).

Figure 4 – Currency analysis
Instrument analysis

The primary type of repo reported in the ex-Japan APAC survey continued to be the repurchase transaction (92.8% of outstanding value from 93.3% in June 2022). Documented buy/sell-backs rose to 7.2% from just 1.5%, as undocumented buy/sell-backs and pledged repo disappeared (from 3.6% and 1.6%, respectively, in June 2022).

In contrast to other markets, where GC repo has been revived by the withdrawal of central banks, the share of tri-party repo in the ex-Japan APAC survey retreated further to reach 4.1% from 6.5% last year.

There was a significant increase in the net repo position of the outstanding tri-party transactions of the survey sample (to 81.4% from 64.8%), that is, the survey sample borrowed more through tri-party repo than in 2022.

The net reverse repo position in outstanding repurchase transactions contracted (the share of gross reverse repo fell to 57.2% from 60.9%) as did the net repo position in outstanding buy/sell-backs (the share of gross repo fell to 51.1% from 56.8%).

Figure 5 – Instrument analysis

Rate analysis

Fixed-rate repos continued to dominate the ex-Japan APAC survey but their share fell back to 94.8% from 97.9% in June 2022, as rising interest rates revived floating-rate repo, in line with the trend in the European market. However, floating-rate repo in APAC lagged behind that in Europe, where it captured 14.9% of the repo market.

Figure 6 – Rate analysis
Maturity analysis

51.2% of the outstanding value of the ex-Japan APAC survey was in short dates (down from 57.2% in the previous survey). This change was driven by increases in long-term repos (over 6 months), open repos and forward repos (to 6.6%, 13.3% and 12.9%, respectively from 3.6%, 8.6% and 10.8% in June 2022). The most active maturity band continued to be one week to one month.

The survey sample ran an almost balanced net position in short dates, the result of a net repo position in outstanding transactions with one day remaining to maturity (gross repo was 65.7% of that maturity band) being offset by a net reverse repo position of transactions with between 7 days and one month (gross reverse repo in this maturity band was 63.0%). There was a larger net repo position in forwards (gross forward repo was 55.7% compared with 50.9% in June 2022) but a much smaller net reverse repo position in open repo (gross reverse open repo was 58.2% compared with 72.6%). There continued to be large net reverse repo positions in outstanding transactions with more than one month remaining to maturity. Broadly speaking, the survey sample borrowed net cash for one day and forward and lent net cash across all other maturity bands.

Compared with the European survey, the ex-Japan APAC survey is relatively longer-term with more outstanding business beyond three months.

Figure 7 – Maturity analysis

Collateral analysis

In the ex-Japan APAC survey, there was a shift in share away from Australian and Chinese securities and most non-APAC collateral into Japanese securities (particularly JGBs), ‘other APAC’ and ‘other non-APAC’ securities. The share of Japanese securities grew to 24.4% from 13.8% in June 2022, mirroring the increase in the share of the yen. This continued the trend seen in 2021, when there was a rebound in the share of Japan securities (mainly JGBs), largely at the expense of eurozone bonds (alongside the fall in the shares of the euro and of European counterparties). By June 2023, the share of eurozone securities had fallen to 1.4% from 4.6%. The share of international bonds (eurobonds) and US Treasuries remained high at 14.4% and 22.2%, respectively, but below the shares of 16.0% and 23.4% reported in 2022. The share of government securities jumped to 66.3% from 40.0% in June 2022 and the survey sample moved from a net reverse repo position closer to balance (the share of gross repo fell to 51.9% from 61.9%). The collateral data suggests the growth in the share of government securities was largely in JGBs.

The survey sample remained a net lender of securities issued in Australia, Japan and non-eurozone Europe. Net lending increased in Japanese securities, while it declined in non-eurozone European issues.
Contract analysis

In the ex-Japan APAC survey, the bulk of legal agreements continue to be GMRAs (little changed at 92.9%), reflecting the dominance of repurchase transactions and the role of the GMRA as the international legal standard.

ASIFMA survey of members’ repo market priorities

Alongside the annual repo market survey, ASIFMA also asked members to identify their current top three markets, the frictions they are encountering in those markets, markets on their radar for future expansion and any impediments to their entry. They were also asked to identify which regulatory, infrastructure and market practice changes were vital to the expansion of the repo market in countries in the region and rate these changes as “must-have” or “nice-to-have”

The survey showed that responding members --- whose regional business is mostly cross-border --- are looking to deepen their current business (cross-border and domestic) but also to broaden their reach into new markets. The number of ASEAN-based members having responded to this questionnaire is higher than in previous years, which might explain the resulting focus on that part of the APAC region.

The results reflect ASIFMA’s broader advocacy priorities in terms of jurisdictions, operating practices and regulatory frameworks.
Table 1: Top three current markets and frictions

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<thead>
<tr>
<th>Country</th>
<th>Australia</th>
<th>China</th>
<th>Indonesia</th>
<th>Japan</th>
<th>Singapore</th>
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</thead>
<tbody>
<tr>
<td><strong>Friction</strong></td>
<td>lack of term repo</td>
<td>express recognition of close-out netting for SFTs</td>
<td>Bank Indonesia absorbs most of the volume</td>
<td>electronic platform needs improvement</td>
<td>low volume and limited number of counterparties</td>
</tr>
<tr>
<td><strong>Friction</strong></td>
<td>cut-off times for settlement link between Austraclear and Euroclear</td>
<td>express recognition of GMRA and GMSLA</td>
<td>continued widespread use of Gentan</td>
<td>lack of incentives for participation</td>
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<td><strong>Friction</strong></td>
<td>broader adoption of collateralisation by title transfer rather than pledge to reduce risk and allow reuse of collateral</td>
<td>illiquidity in some JGB issues</td>
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<td></td>
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<tr>
<td><strong>Friction</strong></td>
<td>no mandatory marginging</td>
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Table 2: Markets for future expansion and impediments

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<tr>
<th>Country</th>
<th>China</th>
<th>India</th>
<th>Indonesia</th>
<th>Japan</th>
<th>Malaysia</th>
<th>South Korea</th>
<th>Taiwan</th>
<th>Thailand</th>
<th>Vietnam</th>
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<tbody>
<tr>
<td><strong>Friction</strong></td>
<td>express recognition of close-out netting for SFTs</td>
<td>very short-term</td>
<td>tax treatment of coupons and cross border transactions</td>
<td>regulatory licence onshore</td>
<td>Islamic repo</td>
<td>access for ICSDs</td>
<td>general use of GreTai</td>
<td>local banks cannot repo Thai government bonds</td>
<td>barriers to foreign access</td>
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<tr>
<td><strong>Friction</strong></td>
<td>express recognition of GMRA</td>
<td>barriers to foreign access</td>
<td>clean netting opinion</td>
<td>legal issues with Gentan and Gensaki</td>
<td>re-use of Korean Treasury bonds</td>
<td>regulatory restrictions on balances</td>
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<tr>
<td><strong>Friction</strong></td>
<td>broader adoption of collateralisation by title transfer rather than pledge to reduce risk and allow reuse of collateral</td>
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Asia-Pacific repo market survey
### Table 3: Top domestic government bonds targeted as offshore collateral

<table>
<thead>
<tr>
<th>Country</th>
<th>Response</th>
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<tbody>
<tr>
<td>Korea</td>
<td>26%</td>
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<tr>
<td>China</td>
<td>21%</td>
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<tr>
<td>India</td>
<td>16%</td>
</tr>
<tr>
<td>Indonesia</td>
<td>16%</td>
</tr>
<tr>
<td>Malaysia</td>
<td>11%</td>
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<tr>
<td>Philippines</td>
<td>5%</td>
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<tr>
<td>Singapore</td>
<td>5%</td>
</tr>
</tbody>
</table>

### Table 4: Must-have and nice-to-have infrastructural, regulatory and market practice changes

<table>
<thead>
<tr>
<th>Category</th>
<th>Must-have</th>
<th>Nice-to-have</th>
</tr>
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<tbody>
<tr>
<td>Regulatory framework</td>
<td>close-out netting</td>
<td>75%</td>
</tr>
<tr>
<td></td>
<td>GMRA recognition</td>
<td>75%</td>
</tr>
<tr>
<td></td>
<td>securities for margin</td>
<td>38%</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>ICSD connectivity</td>
<td>63%</td>
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<tr>
<td></td>
<td>triparty cross-border</td>
<td>13%</td>
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<td></td>
<td>triparty onshore</td>
<td>0%</td>
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<tr>
<td></td>
<td>CCP clearing</td>
<td>0%</td>
</tr>
<tr>
<td>Market practice</td>
<td>title transfer (vs pledge)</td>
<td>75%</td>
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<tr>
<td></td>
<td>re-use</td>
<td>88%</td>
</tr>
</tbody>
</table>
Domestic market snapshot – China

The size of the China bond market has increased almost 80% over the past five years to reach about USD 21 trillion and become the second largest in the world behind the United States (USD 50 trillion). The repo market can be traced back to the early 1990’s and has grown to become one of the largest in the world.

Despite being comparable in size to the largest repo markets in the world, repo in China diverges from international practice. The vast majority of the transactions (99%) are not “true” repo (i.e. title transfer) but loans secured by pledge. The market is split into OTC and an exchange-trade segment. Each segment has its own infrastructure with competing trading venues and CSDs. Nominally, most trading is electronic but, in practice, trades are usually executed OTC and registered on a platform or exchange post-trade. Repos on the exchange-traded market are guaranteed by the CSD but these are not CCPs. Tri-party repo has only just started to appear. For further information and broader data analysis, please refer to the ICMA Guide to Asia Repo Market in China published in October 2022.

Data

Based on data from CFETS, SSE (Shanghai Stock Exchange) and SCH (Shanghai Clearing House), some of the following trends can be observed:

- Pledged repo remains dominant, with over 99.5% of the total repo volume. Outright (“true”) repo, although available and documented under NAFMII master agreement, has lost popularity in the onshore China funding market.
- Interbank Market repos (OTC) traded on CFETS are predominant (75%) over exchange-traded (SSE and SZSE) repos.
- A majority of transactions take place in the two shortest tenors, 1 day (about 85%) and 1 week (about 10%).
- Commercial banks are the main players. Large commercial banks have seen their activity increasing by the biggest margin – by 4 times - over the past 5 years.
- Underlying collateral is dominated by government and Policy Bank bonds (30.2% and 51.8%, respectively, in 2021).

Chart 1: Maturity distribution of OTC pledged repo

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1. Source: CFETS, Shanghai Stock Exchange and Shanghai Clearing House
2. Source: Asiabondonline.adb.org
3. ICMA Guide to Asia Repo Market in China
4. Ditto
Chart 2: Types of OTC repo

Chart 3: Maturity distribution of OTC outright repo

Chart 4: Types of counterparty in OTC pledged repo
Table 5: Shares of pledged versus outright repo by type of counterparty

<table>
<thead>
<tr>
<th>Year</th>
<th>large commercial banks</th>
<th>joint stock commercial banks</th>
<th>urban commercial banks</th>
<th>rural commercial banks and cooperatives</th>
<th>securities company</th>
<th>others</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019</td>
<td>98.99%</td>
<td>1.01%</td>
<td>99.36%</td>
<td>0.64%</td>
<td>97.70%</td>
<td>2.30%</td>
</tr>
<tr>
<td>2020</td>
<td>99.87%</td>
<td>0.13%</td>
<td>99.75%</td>
<td>0.25%</td>
<td>98.70%</td>
<td>1.30%</td>
</tr>
<tr>
<td>2021</td>
<td>99.89%</td>
<td>0.11%</td>
<td>99.79%</td>
<td>0.21%</td>
<td>99.58%</td>
<td>0.42%</td>
</tr>
<tr>
<td>2022</td>
<td>99.98%</td>
<td>0.02%</td>
<td>99.71%</td>
<td>0.29%</td>
<td>99.63%</td>
<td>0.37%</td>
</tr>
<tr>
<td>2023</td>
<td>99.98%</td>
<td>0.02%</td>
<td>99.70%</td>
<td>0.30%</td>
<td>99.65%</td>
<td>0.35%</td>
</tr>
</tbody>
</table>

Regulation and documentation

The enactment of the Futures and Derivatives Law (FDL) in August 2022 has provided assurance on the recognition of international master agreements and the enforceability of close-out netting for derivatives transactions. The scope of the FDL does not cover repo transactions but the CBIRC (China Banking and Insurance Regulatory Commission: now the NFRA or National Financial Regulatory Administration) Notice of November 2021 mentions that key provisions of the FDL apply to “Bond Repurchase” transactions under recognized master agreements, namely, NAFMI, SAC and ISDA. ASIFMA and ICMA have been engaging with the regulators for the inclusion of the GMRA in the list of recognized master agreements under the Notice and for the inclusion of close-out netting for secured funding transactions under a legal framework with similar weight to the FDL.

Domestic market snapshot – India

Secured funding markets in India have grown significantly over the past 20 years. In 2004, unsecured financing accounted for 50% of financial institutions’ financing. That portion has shrunk to well below 10% today. During the same period, repo has maintained its share of growing market volume (30%), while the activity on unsecured funding has migrated to the Collateralized Borrowing and Lending Obligations (CBLO) market in secured loans (60%).

Repo and CBLO are traded on the Repo Order Matching systems (CROMS) of the Clearing Corporation of India Limited (CCIL). Repo can also trade over-the-counter (OTC) but must then be reported to CROMS. Trades on CROMS are guaranteed by CCIL and are therefore anonymous. CROMS accounts for about 94% of total repo transactions.

This analysis focuses only on repo (bilaterally-managed and triparty, cleared and OTC).

Data

Based on included extracts from CCIL’s published data, the following trends can be observed:

- Bilaterally-managed repo grew steadily until 2020, when it jumped in value following the Covid pandemic. However, triparty repo, which was introduced in 2018, has overtaken bilaterally-managed repo.
- The main lenders are foreign banks and mutual funds. The main borrowers are primary dealers and foreign banks. Although proprietary activity remains dominant (72%), client-clearing activity has quadrupled in value since 2019.
- Most trades are for less than 7 days, with the bulk of the activity having shifted to overnight over the past three years.

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5 Source: CCIL
7 ibid
Central government bonds provide the majority of collateral (66% on average) but there has been a shift – over the past 10 years – from Treasury bills to State Government Bonds. The share of the latter now match that of the former (at about 15-16%).

The combination of regulatory reforms introduced over the past five years and the Covid-19 pandemic seem to have played a significant role in the growth of and pattern of activity observed since 2018-2019. A key development has been the recognition of close-out netting and its incorporation into law (the “Netting Act”) on October 1, 2020.

Chart 5: Repo volumes cleared by CCIL

Chart 6: Bilateral reverse repo cleared by CCIL
Chart 7: Bilateral repo cleared by CCIL

- Mutual funds: 66.5%
- Primary dealers: 13.3%
- Financial institutions: 12.2%
- Secondary dealers: 3.5%
- Public sector banks: 2.6%
- Private sector banks: 0.7%
- Cooperatives: 0.6%
- Other institutions: 0.01%
- Insurance companies: 0.5%
- Foreign banks: 0.01%
- Mutual funds: 0.7%
- Public sector banks: 0.5%
- Private sector banks: 1.7%
- Cooperatives: 2.8%
- Other institutions: 3.6%
- Financial institutions: 8.4%
- Secondary dealers: 12.2%
- Insurance companies: 46.7%
- Mutual funds: 29.7%
- Foreign banks: 5.6%

Chart 8: Triparty reverse repo cleared by CCIL

- Mutual funds: 42.6%
- Primary dealers: 18.7%
- Financial institutions: 9.6%
- Cooperatives: 2.8%
- Other institutions: 1.4%
- Secondary dealers: 0.05%
- Public sector banks: 0.7%
- Private sector banks: 0.01%
- Foreign banks: 0.01%
- Insurance companies: 0.05%
- Mutual funds: 0.0%

Chart 9: Triparty repo cleared by CCIL

- Mutual funds: 29.7%
- Primary dealers: 17.1%
- Financial institutions: 12.2%
- Cooperatives: 5.6%
- Other institutions: 3.6%
- Secondary dealers: 8.4%
- Public sector banks: 2.8%
- Private sector banks: 12.2%
- Foreign banks: 0.7%
- Insurance companies: 46.7%
- Mutual funds: 29.7%
Chart 10: Shares of proprietary and customer repo cleared by CCIL

Chart 11: Maturity distribution of repos cleared by CCIL

Chart 12: Type of collateral in repo cleared by CCIL
Repo on corporate bonds has been virtually non-existent to date, mainly due to the undeveloped nature of the underlying corporate bond market and the absence of the sort of infrastructure provided to government securities. The Securities Exchange Board of India (SEBI), which regulates corporate and hybrid securities, is pushing the development of the market. AMC Repo Clearing\(^8\) was incorporated in 2021 and launched in August 2023 to provide triparty repo in corporate debt securities “with the objective of developing the underlying Corporate Bond market in India”.

\(^8\) [https://www.arclindia.com/about/arcl](https://www.arclindia.com/about/arcl)