



Asia-Pacific repo market survey

June 2022 (published December 2022)

Author: Richard Comotto

© International Capital Market Association (ICMA), Zurich, and ASIFMA, Hong Kong, 2022. All rights reserved.

No part of this publication may be reproduced or transmitted in any form or by any means without permission from ASIFMA and ICMA. This report is intended for general information only and is not intended to be nor should it be relied upon as being legal, financial, investment tax, regulatory, business or other professional advice. Users of this report should seek appropriate independent advice before entering into any kind of specific transaction. While the information contained in this report is taken from sources believed to be reliable, neither ASIFMA, ICMA nor the authors represent or warrant that it is accurate, suitable or complete and neither ASIFMA, ICMA nor the authors shall have any liability arising from or relating to the use of this report and its contents.

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 <u>SIFMA</u> in the United States and <u>AFME</u> 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 co-operating to extend the ICMA's semi-annual survey of the European repo market to 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 executed in Europe.

In December 2016, a pilot survey of repo desks located in the APAC region was conducted using a questionnaire based on that for 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 8, 2022. The Asian surveys are timed to coincide with the ICMA's midyear semi-annual European repo market survey.

The participants in the joint Asian survey are largely 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 (eg to include 'pledged 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 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. 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 (Chinese 'pledged repo') or that are hybrids with securities lending (Japanese 'gentan').
- The European and Asian surveys measure 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 have not been adjusted for double-counting where the same transaction were reported by two survey respondents.
- The results do not include repos by central banks which were 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 2022, there were insufficient contributions to the survey of Japanese report to be included in this year's report.

When considering shifts in the survey results, it needs to be remembered that the survey sample size was relatively small, albeit the largest sample to date. Moreover, the composition of the sample changed between surveys. Although there is an unchanged core of major banks, one major non-APAC bank dropped out and a couple of major non-APAC banks joined, which is likely to have skewed the results in a number of ways. To identify such distortions, comparisons have been made between changes in the overall survey results and those of a constant sample of banks who participated in both the 2022 and 2021 surveys.

New data about APAC repo in the European survey (June 2022)

- APAC repo accounted 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 a net borrower of collateral issued in the APAC region, in particular, of JGBs.

APAC counterparties accounted for 4.7% of total outstanding value of repos and reverse repos reported by European dealers, up from 4.3% in June 2021. In terms of outstanding value, business with APAC counterparties rebounded from EUR 365 million to EUR 435 million, close to its level in December 2020.

APAC counterparties identified by the European survey sample accounted for 3.7% of the survey and reverse repos for 5.5%, compared with 4.0% and 5.1%, respectively, in June 2021. European dealers in the survey therefore continued to be net cash lenders (net collateral borrowers). The variability in activity with APAC counterparties was in the amount of gross cash lending (gross securities borrowing) by the survey sample. This grew to EUR 270 million from EUR 205 million in June 2021.

APAC currencies accounted for 6.8% of total outstanding repos and reverse repos traded by the European survey sample, up from 6.3% in June 2021 and 6.7% in June 2020. Japanese yen accounted for 5.7% (compared with 5.2% in June 2021) and 5.7% in June 2020). Reverse repos accounted for about 59% of transactions in yen and 50% in other APAC currencies. The survey sample remained a net cash lender in APAC currencies.

The overall share of APAC collateral repoed out and reversed in by the European survey sample was 6.4% up from 5.1% in June 2021. These changes were again largely driven by Japanese collateral, in particular, by JGBs. Japanese collateral in total accounted for 5.3% and JGBs for 4.0% of the outstanding value of the European survey (up from 4.7% and 3.5%, respectively, in June 2021). In addition, 0.2% of collateral in the European survey was issued in "other OECD APAC" countries; 0.5% was non-OECD APAC collateral; and 0.4% was in APAC eurobonds (similar shares to the last survey except for "other OECD APAC", which dropped from 0.4% in June 2021).

Survey results of the June 2022 APAC (ex-Japan) survey

Summary

- The bulk of business in the ex-Japan APAC repo market continued to be directly negotiated but voice-brokers and, to a lesser extent, automatic electronic trading systems increased their share.
- Cross-border business between the APAC region and Europe lost ground to domestic and cross-border business within APAC.
- Changes in the geography of business were reflected in major shifts in shares away from counterparties in Europe, the US and major Asian markets to "other APAC" and Australian counterparties.
- The share of CCP-cleared repos jumped.
- The US dollar remained the dominant currency in the APAC repo business measured by the survey but the Japanese yen took a much increased share, largely at the expense of the euro. The Australian dollar continued to be a significant component.

- Reflecting the changes in the geography of the survey, there were also major shifts in shares away from European securities and, to a lesser extent, US Treasuries, in favour of Japanese securities and international bonds (eurobonds).
- Government securities became the largest class of collateral.
- US Treasuries and Australian securities remained significant sources of collateral but much larger shares for Japanese securities and international bonds squeezed European securities.
- There was a sharp increase in the share of short-dates but much reduced activity in forward and open repos.
- Transactions overwhelmingly remained in the form of repurchase transactions but undocumented buy/sell-backs reappeared.
- 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 USD 310.9 billion in outstanding value of repos and reverse repos and an average daily turnover of USD 43 billion, compared with USD 260.1 billion (+19.5%) and USD 29 billion per day (+48.3%) in 2021. Average deal size fell to USD 47 million from USD 56 million in 2021.

The change in the headline numbers partly reflected an increase and change in the composition of the survey sample. This can be seen if the survey results are recalculated for a constant sample of banks who participated in both the 2022 and 2021 surveys. For this constant sample, there was a fall of 11.0% in the outstanding value but an increase of 39.7% in turnover, suggesting that an underlying shortening of the average remaining term to maturity was masked by the change in the composition of the survey sample.

The ex-Japan APAC survey sample remained a net cash lender and therefore a net borrower of securities in terms of outstanding value. However, this was by a smaller margin than in 2021 (53.2% of outstanding value was in reverse repo, compared with 57.6% in 2021). In terms of turnover, the sample became a marginal net lender of securities (50.9% of turnover was in repo, compared with 51.2% in 2021), implying maturity transformation by the sample, with the average term of securities lending being shorter than the average term of securities borrowing and net securities lending running off faster than net securities borrowing.

Geographical analysis

The major share of the outstanding business reported in the ex-Japan APAC survey continued to be cross-border, although this fell to 69.4% of outstanding value from 73.9% in 2021, reflecting a drop in cross-border business with Europe to 21.6% from 30.4% and an increase in domestic business to 30.6% from 24.9%. On the other hand, cross-border business with other APAC counterparties grew to 31.4% from 26.3%.

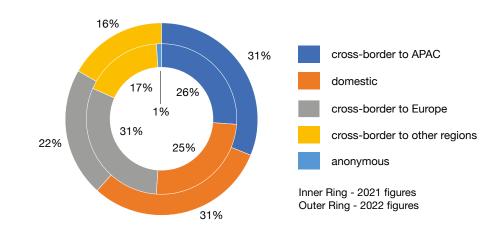


Figure 1 – Trading analysis --- domestic v cross-border

There was an increase in business with Australia (to 8.2% from 5.1%) but significant falls with respect to counterparties in the US (to 5.1% from 10.7%), China (to 6.6% from 9.1%), Singapore (to 9.6% from 11.8%) and Europe (31.0% from 41.2%). In total, outstanding business with other APAC counterparties grew to 56.3% from 43.2%.

The survey sample continued to be a net cash borrower from and net securities lender to China and the US; switched back to being a net cash borrower/securities lender to Australia; and remained a net cash lender/securities borrower from Hong Kong, Singapore, Europe and others (note that the European repo survey shows that Europe was a net borrower of APAC securities).

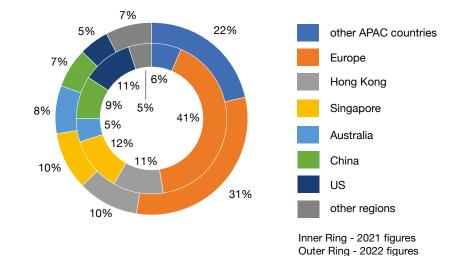


Figure 2 – Geographical analysis

Trading analysis

Most of the business reported in the ex-Japan APAC survey continued to be transacted directly between parties. However, this share fell (to 85.6% from 88.9% in 2021) as the share of voice-brokers jumped (to 12.1% from 8.0%), particularly in domestic business (to 3.0% from 0.1%). Automatic electronic trading (on a central limit order book or CLOB) contracted to 2.3% from 3.2% and automated electronic trading (using request-for-quotes or RFQs) also fell (to 1.1% from 3.2%).

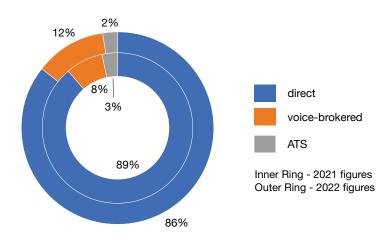


Figure 3 - Trading analysis --- type of venue

The share of CCP-cleared repos jumped to 16.5% from 1.6% in 2021. Part of this growth reflected a change in the composition of the survey sample but there was also significant growth in the CCP-cleared business of the constant sample of banks participating in both the 2022 and 2021 surveys (to 9.0% from 1.6%). As no outstanding business was reported as having been negotiated electronically and anonymously (that is, on a platform connected to a CCP), compared with 1.2% last year, most CCP-cleared business would again seem to have been negotiated directly between parties and registered with a CCP post-trade.

The survey sample switched back to net cash borrowing from and net securities lending to counterparties in the same country (51.5% of the outstanding value of domestic trades was in repos, compared with 37.6% in 2021) but remained a net cash lender/securities borrower in cross-border transactions with Europe, although by a narrower margin (reverse repos were 53.4% compared with 60.0%). Cross-border business with other APAC counterparties continued to be net cash lending/securities borrowing (60.9% compared with 55%).

Directly-negotiated repo remained a net cash lending/securities borrowing channel for the survey sample (55.3% was reverse repo compared with 58.4% last year) and automatic electronic trading remained a net cash borrowing/securities lending channel (68.3% was repo compared to 80.8% in 2021). However, voice-brokers switched from net cash lending/ securities borrowing on behalf of the survey sample to net cash borrowing/securities lending (57.1% was repo compared with 36.7% last year).

Currency analysis

The most traded currency reported in the ex-Japan APAC survey remained the US dollar (51.6% compared with 52.2% in 2021). Japanese yen was second, having jumped to 21.5% from 6.8%. The share of the Australian dollar was virtually unchanged at 16.7%. The share of APAC currencies increased (to 42.9% from 32.1%), largely at the expense of the euro, which plummeted to 4.2% from 15.4%. Changes in the composition of the survey sample had a major negative impact on the share of the Australian dollar but significantly boosted the share of the yen and, to a modest extent, other currencies.

The survey sample remained a net cash borrower in yuan, yen and, in particular, minor APAC currencies. It stayed a net cash lender in Hong Kong dollars (99.4% of Hong Kong dollar business was in reverse repo), but also in Singapore dollars (73.9% was in reverse repo) and US dollars (63.5% in reverse repo). There was a switch to net cash borrowing by the survey sample in Australian dollars. The European repo survey sample continued to be a net cash lender in APAC currencies.

The share of cross-currency repo grew to 10.6% from 8.3% despite the fall in the share of the US dollar, which is most commonly-used in cross-currency repo. Cross-currency repo remained a net cash lending channel for the survey sample (61.4% in reverse repo)

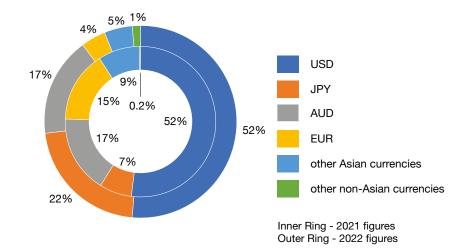


Figure 4 – Currency analysis

Instrument analysis

The primary type of reported in the ex-Japan APAC survey continued to be repurchase transactions (unchanged at 93.7%) but there was an uptick in undocumented sell/buy-backs (to 2.7% from zero). Pledged repo declined to 1.2% from 2.4%.

The share of tri-party repo collapsed to 5.0% from 16.5% of the outstanding value of the survey. This reflects, in part, a change in the composition of the survey but the change in the business of the constant sample of banks who participated in both the 2022 and 2021 surveys showed an underlying reduction in tri-party repo.

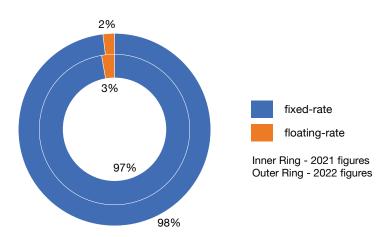
Net cash lending/securities borrowing continued to be through GMRA-style repurchase transactions and net cash borrowing/securities lending through buy/sell-banks. Pledged repo switched from a channel for net cash borrowing to net cash lending (pledged repo cannot be used for securities lending or borrowing).

Figure 5 – Instrument analysis

Rate analysis

The share of fixed-rate repos in ex-Japan APAC survey increased to 98.1% from 97.4% in 2021, notwithstanding rising interest rates.

Figure 6 – Rate analysis



Maturity analysis

The survey measures the stock of business still outstanding on the survey date and not the flow of business over the preceding year. This means short-term transactions are under-represented because most run off between survey dates. They would represent a much higher share of turnover.

Some 61.6% of outstanding value reported in the ex-Japan APAC survey was in short dates (up from 46.9% in the previous survey). This was driven by increases in transactions with only one day remaining to maturity (to 19.2% from 9.8%) and those with at least one week but no more than one month (to 25.2% from 16.6%). On the other hand, transactions with between one and six months increased to 19.4% from 12.9% but business beyond six months was little changed at 2.9%. Forward repos fell back sharply to 9.2% from 22.0% and open repo dropped to 7.0% from 15.1%.

The shares of short-dated repos were modestly boosted and other remaining terms to maturity were modestly diluted by changes in the composition of the survey sample.

The survey sample continued to run a positive net funding gap, borrowing cash net to seven days and lending net in longer-term (particularly over one-month) and open transactions.

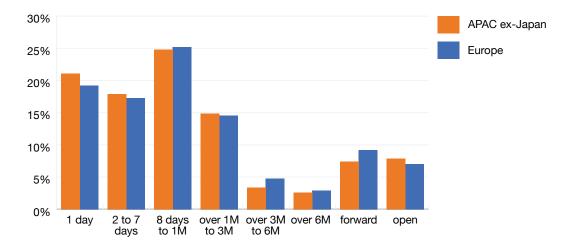


Figure 7 – Maturity analysis

Collateral analysis

In the ex-Japan APAC survey, there were again a big change in collateral composition. This was driven by a rebound in the share of Japan securities (mainly JGBs) to 26.0% from 9.7%, largely at the expense of eurozone bonds, which dropped to 4.1% from 18.0% (mirroring the fall in the shares of the euro and European counterparties). The share of international bonds (traditionally called "eurobonds") increased to 12.5% from 0.6%. Singapore securities were unchanged at 2.6% and "other APAC" securities decreased to 4.9% from 5.2%.

US Treasuries slipped back to 19.4% from 22.1%, "other US securities" to 5.5% from 9.8%, "other European securities" to 2.3% from 2.8% and Chinese securities to 3.4% from 5.2%.

The share of government securities surged to 51.8% from 30.8% and the survey sample moved from being a significant net borrower of government securities to an almost flat position. As the increase in the share of JGBs was largely offset by the contraction in the share of eurozone government securities and US Treasuries, the overall increase in the share of government securities may have been driven by domestic issues.

The survey sample remained a net securities lender of Australian and eurozone securities. It became a net lender of Japanese securities from a previously flat position and continued to be a net securities borrower in Chinese, Hong Kong, Singaporean and "other APAC" securities as well as US Treasuries. Two-thirds or more of business in these issues and international securities was net borrowing.

Changes in the composition of the survey sample had a negative impact on the share of Australian securities and, to a lesser extent, US Treasuries but significantly boosted the share of Japanese securities.

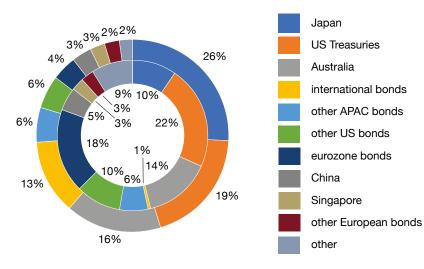


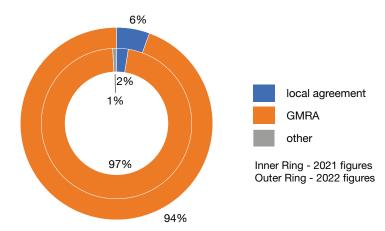
Figure 8 – Collateral analysis

Inner Ring - 2021 figures Outer Ring - 2022 figures

Contract analysis

In the ex-Japan APAC survey, the bulk of legal agreements continue to be GMRAs (slightly lower at 94.4%), reflecting the dominance of the repurchase transactions and the role of the GMRA as the international standard.

Figure 9 – Contract analysis



ICMA Hong Kong

T: +852 2531 6592 Unit 3603, Tower 2, Lippo Centre 89 Queensway Admiralty Hong Kong apac@icmagroup.org www.icmagroup.org

Asia Securities Industry & Financial Markets Association

Tel: +852 2531 6500 Unit 3603, Tower 2, Lippo Centre 89 Queensway Admiralty Hong Kong info@asifma.org www.asifma.org