ICMA

International Capital Market Association

The Asia-Pacific Cross-Border Corporate Bond Secondary Market

A report on the state and evolution of the market

An initiative of the **ICMA Asia-Pacific Regional Committee** and the **ICMA Secondary Market Practices Committee**

August 2018

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Executive Summary

- As part of its remit and commitment to serving its APAC members, and given that many of the current themes in the European markets have potential relevance in APAC as well, it was felt that a report on the state and evolution of the cross-border APAC secondary bond markets would be a valuable contribution to ICMA's members and partners, complementing ICMA's work on European credit markets and leveraging ICMA's international expertise in this field.
- The interviews point to the rapid rise in issuance and the size of the foreign currency (in particular USD) corporate bond market since around 2010-11, which has accelerated further in the past two years, driven primarily by Chinese financial and non-financial issuers coming to the market. From 2011 to 2017, annual APAC corporate issuance in USD, EUR, and GBP has more than trebled to over USD 930bn, with Chinese names accounting for more than 40% of total issuance in 2017, compared with less than 20% in 2011.
- A number of participants pointed to what one dubbed the 'Asia-fication' of the APAC markets, with regional investment funds and life insurers beginning to dominate buy-side flows in G3 credit. Again, China is a large part of the story, with many Chinese investment firms and securities companies opening offshore offices (primarily in Hong Kong).
- The interviews paint a mixed picture with respect to secondary market liquidity. Many participants suggest that, in general, liquidity for investment grade (IG) G3 corporates tends to be relatively good, although this is very much a function of the underlying issue size. Some also suggest that this has improved in the past two to three years. However, other respondents state that while bid-side liquidity is generally good, offer-side liquidity is much thinner, and that it is usually difficult to find offers in decent sizes. Some also note that relative to the increase in overall G3 corporate issuance and outstandings, secondary market trading volumes have lagged.
- A common topic raised by both sell-side and buy-side firms is the lack of development in underlying repo and securities lending markets for APAC G3 credit. To a large extent this seems to limit secondary market growth and activity. Participants explain that many regional investors do not lend their holdings back into the market, and that supply is largely contingent on hedge funds and international real money investors.
- Respondents report that there is generally little interest from investors in corporate single name credit default swaps (SN-CDS), either as a hedging instrument or an alternative investment vehicle, particularly with the diminution of hedge fund involvement in the regional market.
- In terms of regulatory impacts, these are mostly imported from US and European regulation. Basel III has put pressure on the balance sheets and trading books of international banks, as has the Volcker Rule, while MiFID II/R is being 'globalised' by a number of European and international investment firms. Perhaps more significantly, regional regulators appear to be watching the impacts of MiFID with a view to introducing their own regulatory initiatives around transparency and best execution.
- While in many respects the Asia region leads the US and Europe in terms of financial technological innovation and adoption, the interviews, for the most part, point to a relatively slow uptake of trading platforms in the cross-border bond markets. The major global incumbent platforms also tend to lead in the APAC markets, with a handful of international and regional platforms carving out geographical and product niches. However, overall levels of e-trading, at least anecdotally, appear to be low compared to the US and Europe.
- The internationalisation of local currency markets in the APAC region is of key interest to interviewees, in particular the opening up of the CNY domestic corporate bond market. While there remain a number of barriers to entry, in particular concerns around the transparency of issuers' balance sheets, the absence of reliable credit ratings, and uncertainty around Chinese bankruptcy and tax law, the general view is that international inflows into the CNY bond markets are set to accelerate.

Introduction

Why this report?

ICMA is committed to promoting resilient, well-functioning international debt capital markets, which help to underpin global economic growth. ICMA views efficient and liquid secondary markets as an integral component of overall market resiliency, and its Secondary Market Practices Committee (SMPC) brings members active in the international secondary bond markets together to address practical issues directly relevant to market practitioners, standardise market best practice, disseminate relevant market information, and promote the best interests of an efficient and liquid market.

In recent years, secondary bond markets have undergone significant change, with post-crisis regulatory reforms, extraordinary monetary policy, and new technologies and innovation impacting market dynamics and reshaping market structures. ICMA, though the SMPC, has been actively engaged with its members in monitoring market evolution, particularly with respect to the European investment grade corporate bond market. The SMPC has published two reports on the state and evolution of the European corporate bond market (2014[1] and 2016)[2], as well as reports on the European credit repo market (2017)[3] and the European single name credit default swap market (2018).[4] These reports are intended to provide market participants, regulators, policy makers, and other stakeholders with a deeper understanding of evolving market structure, and the dynamics shaping market quality and liquidity, as well as identifying potential risks to market efficiency and resilience.

During this time, ICMA has also expanded its work in the Asia-Pacific (APAC) region, significantly increasing its membership, creating an Asia-Pacific Regional Committee of members, as well as working collaboratively with a range of regional associations to promote the development of regulatory and market best practice initiatives. As part of its remit and commitment to serving its APAC members, and given that many of the current themes in the European markets have potential relevance in APAC as well, it was felt that a report on the state and evolution of the cross-border APAC secondary bond markets would be a valuable contribution to ICMA's members and partners, complementing ICMA's work on European credit markets and leveraging ICMA's international expertise in this field.

Scope

The report is primarily focused on the APAC cross-border corporate bond markets. Accordingly, the scope of the report is largely confined to G3 (USD, EUR, GBP)[5] denominated bonds of non-financial and financial corporate issuers, as defined by having issuer country of risk within the APAC region (see Annex III for a list of countries included). The outstanding size of this market is approximately USD 2.5 trillion.

The general view is that local currency (LCY) corporate bond markets, for the most part, are currently too heterogenous and localised in terms of structure and participants, and that other market observers, such as the Asean+3 Bond Forum and Asian Development Bank, have already published extensively on these markets.[6]

However, to the extent that LCY markets are discussed in the various interviews, the report makes some reference to their development, particularly where the markets are opening up to international investors and issuers.

In particular, one of the more important developments in the APAC bond markets is the ongoing internationalisation of the onshore Chinese (CNY) bond market, which was a frequently discussed topic in the interviews for this report. Hence it was decided that this should also be a central focus of the report, from the perspective of CNY corporate issuance.

1 ICMA, 2014, The current state and future evolution of the European investment grade corporate bond secondary market: perspectives from the market
2 ICMA, 2016, Remaking the corporate bond market: ICMA's 2nd study into the state and evolution of the European investment grade corporate bond secondary market
3 ICMA, 2017, The European Credit Repo Market: The cornerstone of corporate bond market liquidity
4 ICMA, 2018, The European Corporate Single Name Credit Default Swap Market
5 Here 'G3' refers to USD, EUR, and GBP, and not JPY.
6 See: www.adb.org/publications/series/bond-market-guides

Methodology

ICMA adopted a similar approach to that of the previous European based studies, combining both qualitative and quantitative research and analysis.

The qualitative research is largely based on a number of semi-structured interviews with market practitioners and stakeholders from a range of firms actively involved in the APAC cross-border secondary corporate bond markets, including sell-side broker dealers, asset managers and investment firms, trading venues and platforms, and market infrastructure providers. The researchers were keen to establish a balance between international and more regional firms. The information provided through the interviews represents the perspectives of 28 different firms or institutions, and almost 50 individuals. Interviews were largely conducted in two rounds, in August 2017 and March 2018, and mainly held in person in the respective firms' locations (primarily Hong Kong, Singapore, and Shanghai).

The key themes that the researchers were keen to explore through the interviews were:

- Trends in market size and structure, including issuers and investors
- Primary and secondary market liquidity conditions
- Evolution of ancillary financing and hedging markets
- Impacts of post-crisis financial and market regulatory reforms
- Developments in e-trading and new market technologies
- The internationalisation of local currency corporate bond markets, in particular the onshore Chinese bond market
- Potential risks and opportunities

The quantitative research and analysis used in this report is intended to illustrate and augment the narrative drawn out from the qualitative research. Much of the market data is taken from Bloomberg, with kind permission, while ICMA is also thankful to Trax (a subsidiary of MarketAxess) for providing trading volume data, DataLend for providing securities lending data, ISDA for providing CDS market analysis, and Bond Connect Company Limited for providing data related to the Bond Connect platform.

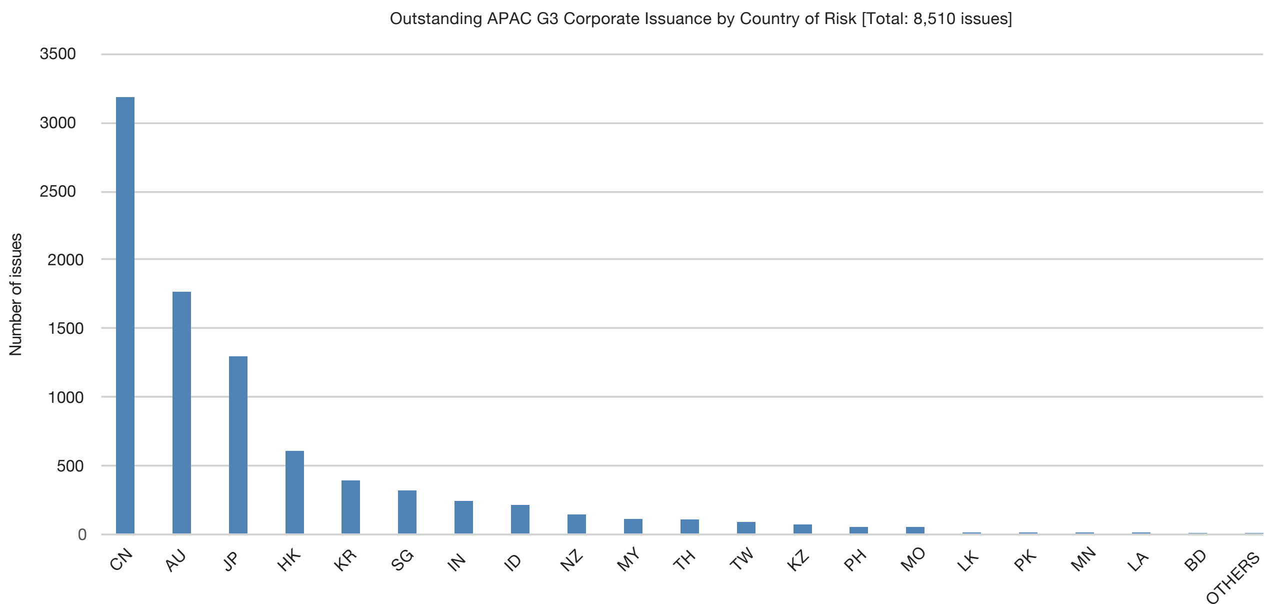
Chapter 1: Trends in market size and structure

Market size

As of May 2018, the APAC G3 cross-border corporate bond market consisted of approximately 8,500 outstanding issues (see Figure 1), with an underlying nominal value of almost USD 2.5tn (see Figure 2). The bulk of outstanding issuance is bank and other financial institution debt, with just over USD 900bn of outstanding issuance being non-financial corporate debt (see Figures 3 and 4). This reflects a growth in overall market size of 60% since 2014.

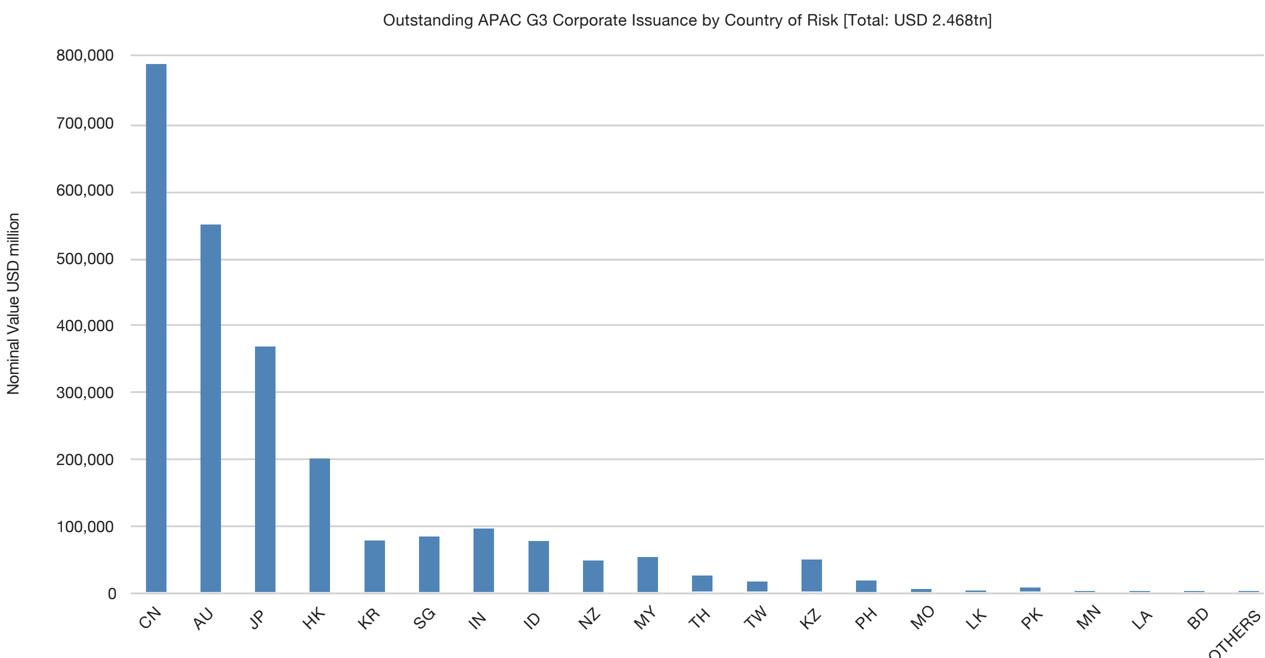
From an underlying currency perspective, the majority of outstanding APAC G3 corporate issues are denominated in USD (90%), with bonds denominated in EUR and GBP making up only 8% and 2% respectively (see Figure 5).

Figure 1: Outstanding APAC G3 corporate bonds number of issues (May 2018)



Source: ICMA analysis using Bloomberg data

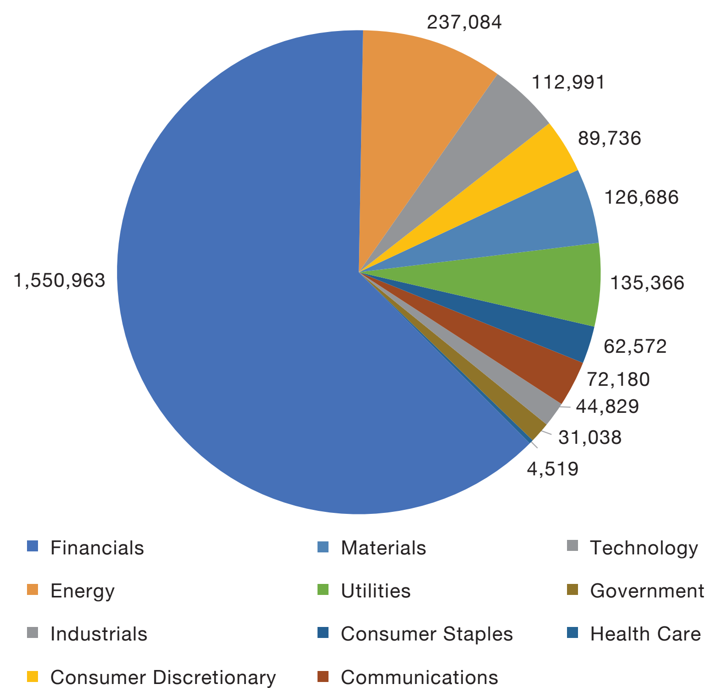
Figure 2: Outstanding APAC G3 corporate bond issuance - nominal value (May 2018)



Source: ICMA analysis using Bloomberg data

Figure 3: Outstanding APAC G3 corporate bond issuance by sector (May 2018)

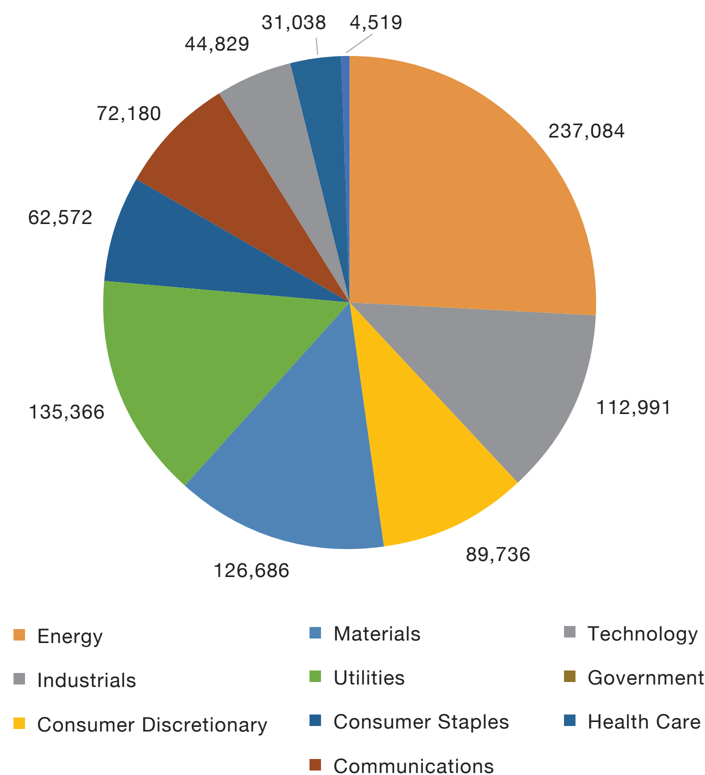
Outstanding APAC Corporate Issuance by Sector (USDmm)



Source: ICMA analysis using Bloomberg data

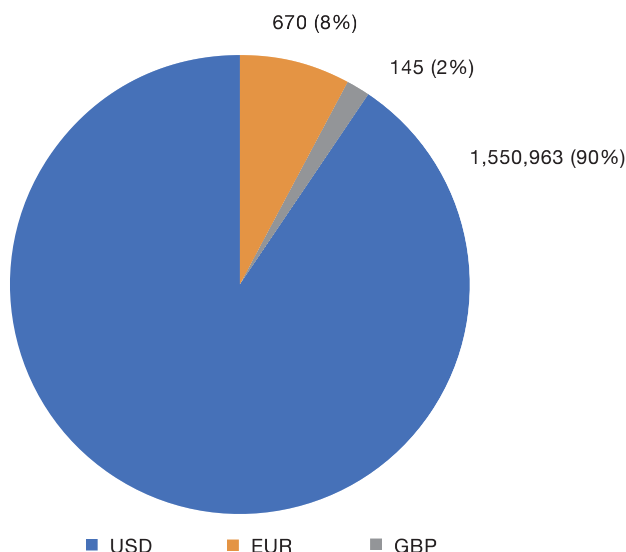
Figure 4: Outstanding APAC G3 non-financial corporate bond issuance by sector (May 2018)

Outstanding APAC Corporate NF Issuance by Sector (USDmm)



Source: ICMA analysis using Bloomberg data

Figure 5: Outstanding APAC G3 corporate bond issuance by currency (May 2018)

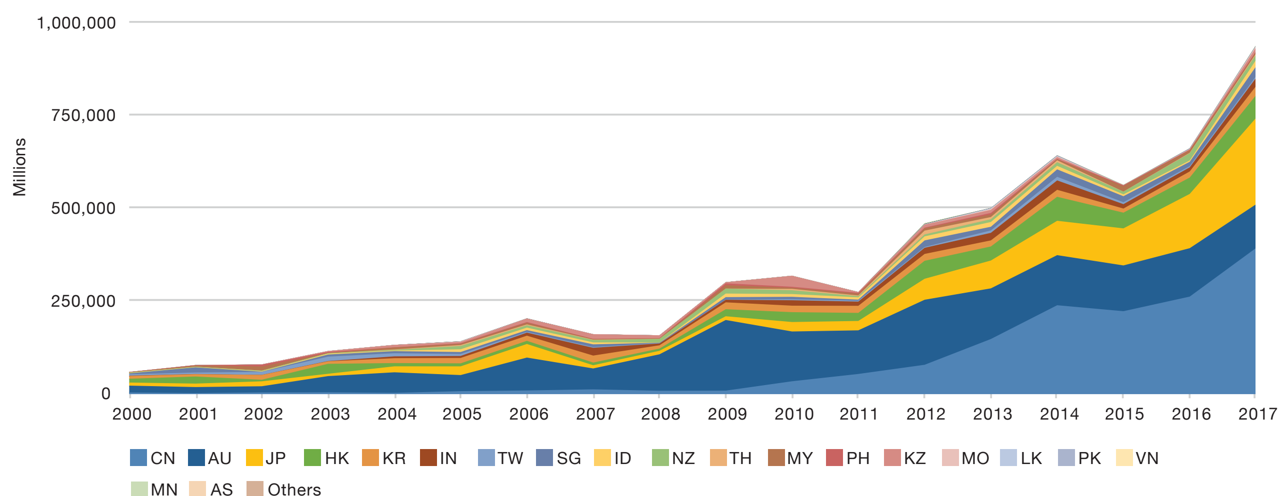


Source: ICMA analysis using Bloomberg data

Issuers

Many of the interviews highlight the rapid rise in issuance and the size of the G3 (in particular USD) corporate bond market since around 2010-11, which has accelerated further in the past two years, driven primarily by Chinese financial and non-financial issuers coming to the market. From 2011 to 2017, annual G3 APAC corporate issuance has more than trebled to over USD 930bn, with Chinese names accounting for more than 40% of total issuance in 2017, compared with less than 20% in 2011 (see Figure 6). Based on issuance to date, 2018 points to a similar scale of issuance as 2017, with Chinese issuers again dominating by a similar margin.[7]

Figure 6: Annual APAC G3 corporate issuance by country of risk (2000 - 2017)

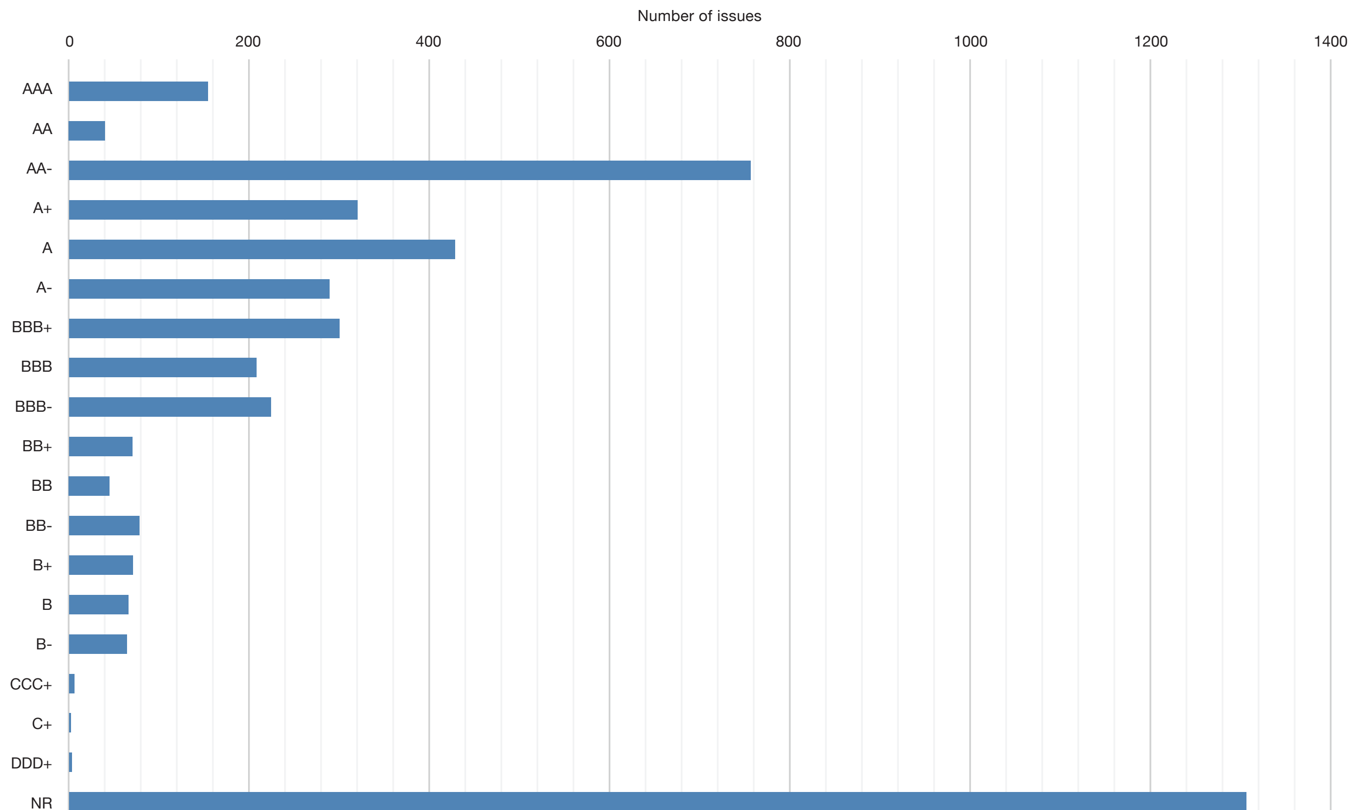


Source: ICMA analysis using Bloomberg data (see Annex III for country codes)

The recent dominance of Chinese corporate issuance has not only helped to grow the APAC G3 market, but, as interviewees explained, it has also given more breadth and depth to the high yield (HY) segment of the market, with many of the new issuers having low or no internationally recognised credit ratings (see Figure 7).

7 At the time of publishing, this trend has appeared to have slowed, pointing to lower projected gross issuance in 2018.

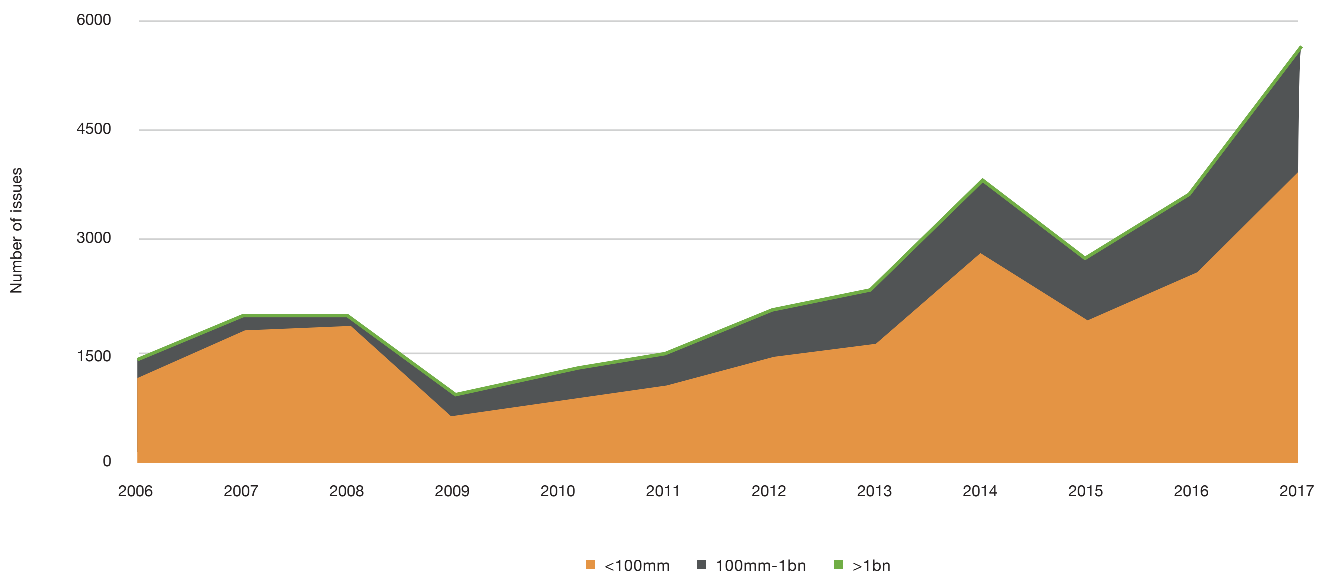
Figure 7: Outstanding APAC G3 corporate issues by credit rating[8] (May 2018)



Source: ICMA analysis using Bloomberg data

Another observation reported through the interviews is that not only has overall issuance increased, but issue sizes have also become much larger. A number of participants suggest that only a few years ago, the majority of new issues would be under USD 100mm nominal, certainly under USD 1bn, with only a few marquee issues of over USD 1bn. In more recent years, USD 1bn-plus issues have become fairly standard, while issue sizes of USD 2bn or more are no longer unusual. Again, it appears to be Chinese names dominating the larger issuances.

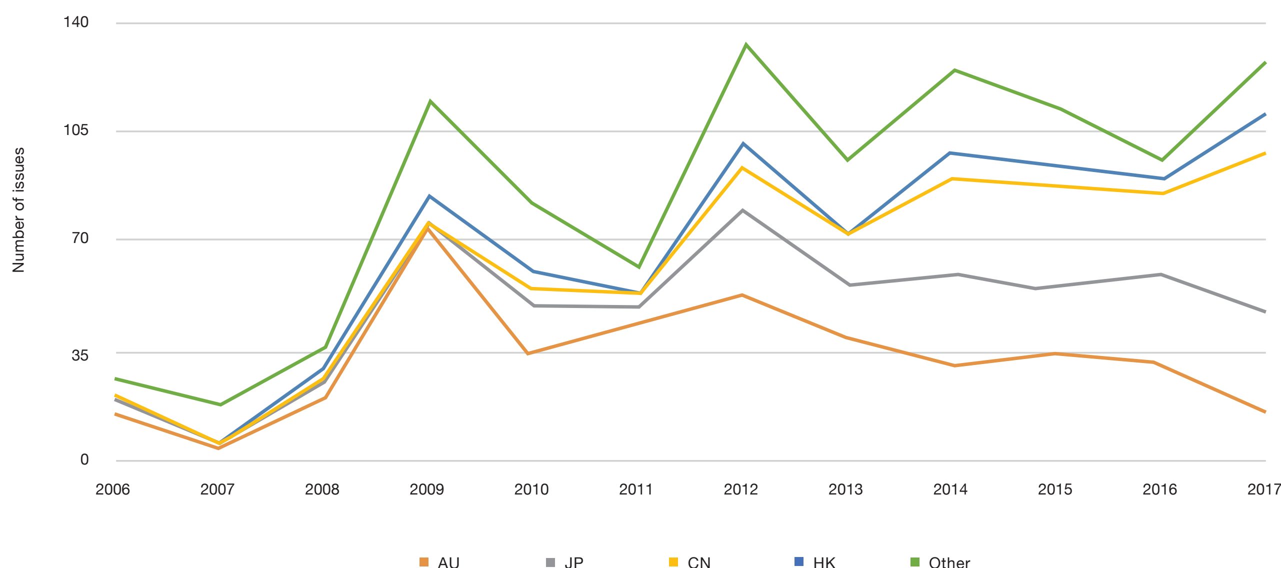
Figure 8: APAC USD corporate new issue sizes



Source: ICMA analysis using Bloomberg data

8 Bloomberg composite rating.

Figure 9: APAC USD corporate new issuance ≥ USD 1bn nominal



Source: ICMA analysis using Bloomberg data

Figure 10: Largest outstanding APAC G3 corporate issue tranches

Issuer Name	Cpn	Maturity	Curr	Amount Issued	Issue Date	BBG Composite	144A Eligible
Postal Savings Bank of China Co Ltd	4.5	PERP	USD	7,250,000,000	27/09/2017	NR	N
BTA Bank JSC	0	30/06/2020	USD	5,221,490,000	25/08/2010	N/A	YN
China Evergrande Group	8.75	28/06/2025	USD	4,680,480,000	28/06/2017	B-	N
CHMT Peaceful Development Asia Property Ltd	7.5	25/10/2019	USD	3,328,660,000	28/06/2017	N/A	N
China Cinda Asset Management Co Ltd	4.45	PERP	USD	3,200,000,000	30/09/2016	NR	N
Kaisa Group Holdings Ltd	9.375	30/06/2024	USD	3,119,000,000	30/06/2017	N/A	N
Mitsubishi UFJ Financial Group Inc	2.95	01/03/2021	USD	3,100,000,000	01/03/2016	A	N
China Construction Bank Corp	4.65	PERP	USD	3,050,000,000	16/12/2015	BB-	N
1MDB Global Investments Ltd	4.4	09/03/2023	USD	3,000,000,000	19/03/2013	NR	N
Bank of China Ltd	5	13/11/2024	USD	3,000,000,000	13/11/2014	BBB	N
Petronas Capital Ltd	5.25	12/08/2019	USD	3,000,000,000	12/08/2009	A-	N
Mitsubishi UFJ Financial Group Inc	3.85	01/03/2026	USD	3,000,000,000	01/03/2016	A	N
1MDB Global Investments Ltd	4.4	09/03/2023	USD	3,000,000,000	19/03/2013	NR	N
Petronas Capital Ltd	5.25	12/08/2019	USD	3,000,000,000	12/08/2009	A-	Y
Bank of China Ltd	5	13/11/2024	USD	3,000,000,000	13/11/2014	BBB	Y

Source: ICMA analysis using Bloomberg data (rating is Bloomberg composite rating)

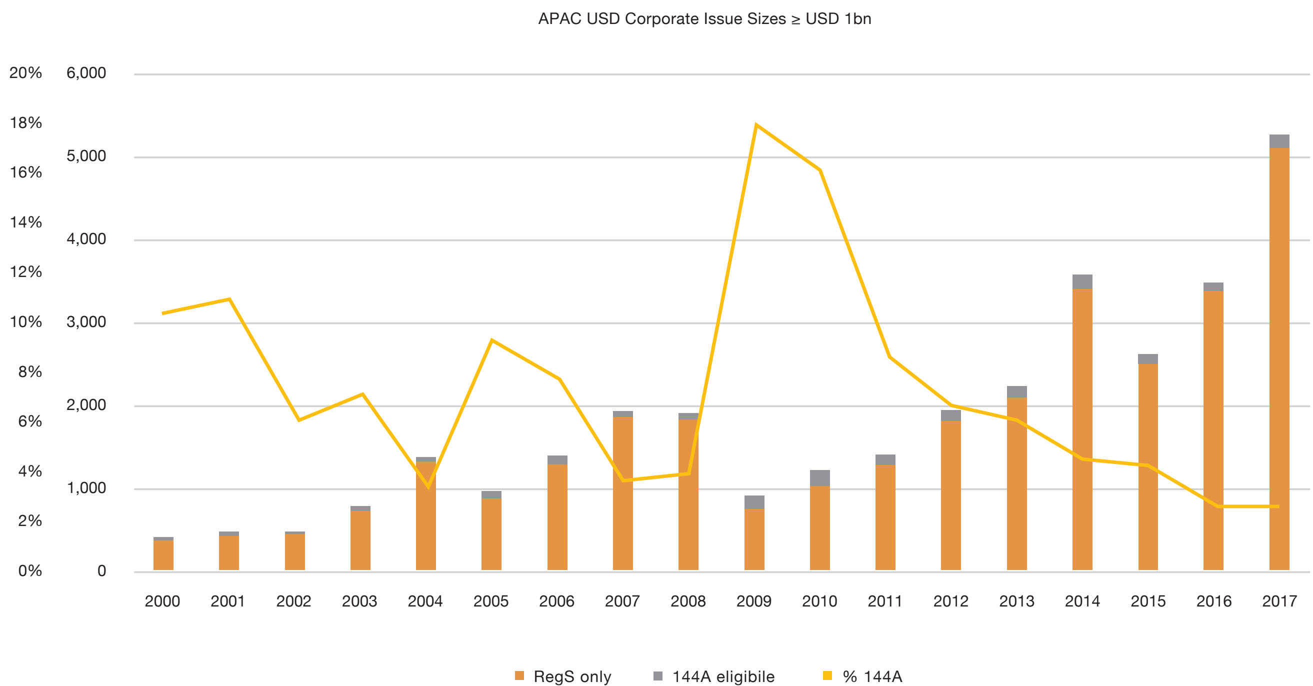
Investors

A number of participants observed what one dubbed the 'Asia-fication' of the APAC markets, with regional investment funds and life insurers beginning to dominate buy-side flows in G3 credit. Again, China is a large part of the story, with a spate of Chinese investment firms and securities companies opening offshore offices (primarily in Hong Kong). Private Banks have also been a longstanding fixture of the regional buy-side, and again interviewees report that these flows have become more important in recent years due to the recent rapid growth in Chinese private wealth, as well as a propensity to use leverage to invest in bonds. It is Chinese investment flows that also seem to be the main absorber of the growing Chinese corporate new issuance, as investors have greater affinity with the underlying credits and are less sensitive to international credit ratings. Meanwhile, hedge funds have become a less important part of the equation since the global financial crisis.

Interviewees suggest that international real money investment flows remain important, and that these mainly come from global emerging market funds. Furthermore, these funds, which traditionally based their execution desks in New York or London, are increasingly opening offices in the region, partly to be in the same time zone, but mainly to be closer to the market.

A number of participants suggested that the decreasing dependence on international investment flows is evidenced by the lack of reliance on 144A issuance (i.e. issuance that can be marketed and sold to US investors). Historically, all large issues (USD 500mm or above) would have a 144A tranche to ensure that they went well. In recent years this has not been the case, and increasingly new issuance, including the larger marquee issues, tends to be RegS only, excluding US investors (see Figure 11).

Figure 11: APAC USD corporate issuance: RegS vs 144A eligible

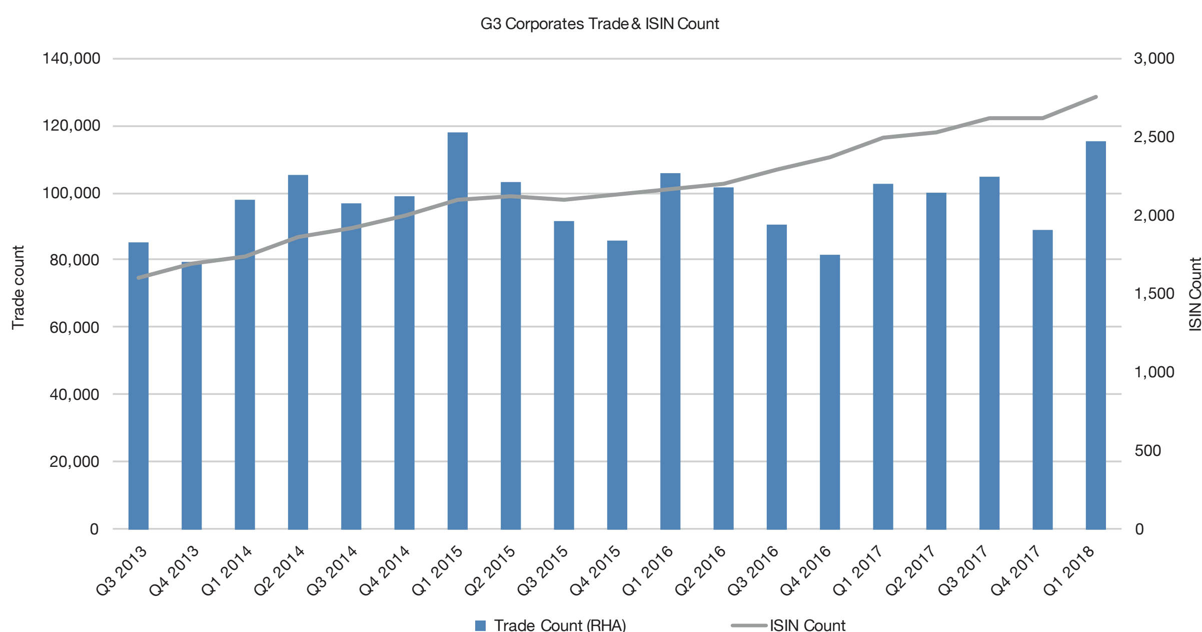


Source: ICMA analysis using Bloomberg data

Chapter 2: Market liquidity

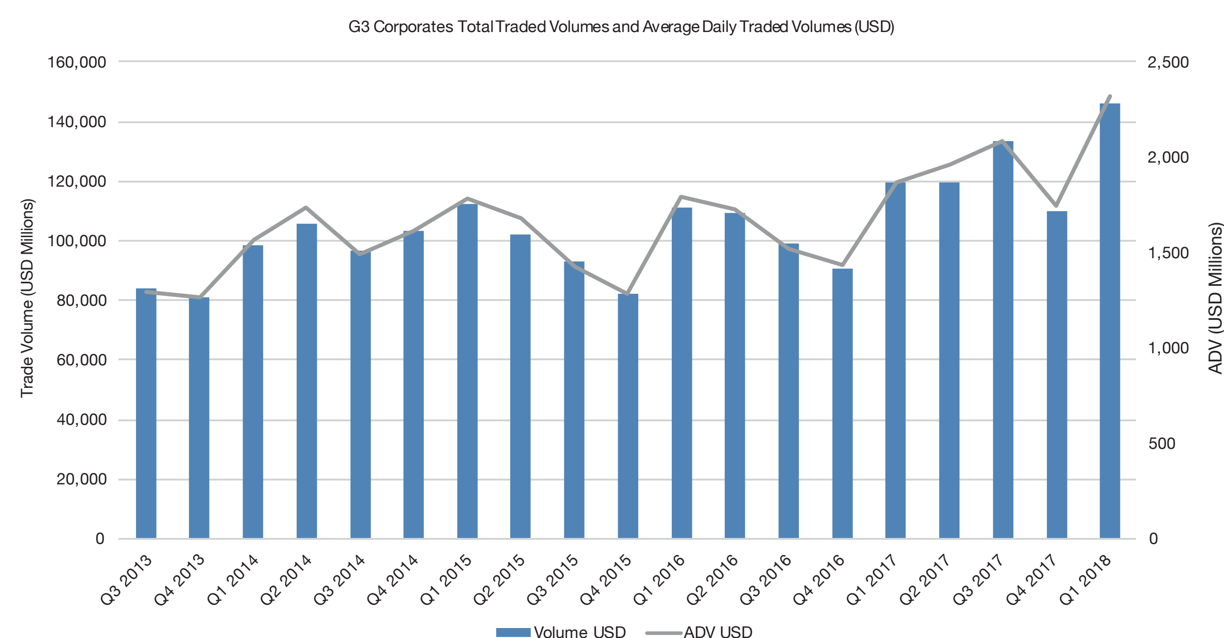
The interviews paint a mixed picture with respect to secondary market liquidity. Many participants suggest that in general liquidity for IG G3 corporates tends to be relatively good, and that usually it is not difficult to trade clips of USD 5 to USD 10mm, and possibly up to USD 20mm, although this is very much a function of the underlying issue size. Some also suggest that this has improved in the past two-to-three years. However, other respondents state that while bid-side liquidity is generally good, offer-side liquidity is much thinner, and that it is usually difficult to find offers in decent size clips. Some also note that relative to the increase in overall G3 corporate issuance and outstandings, secondary market trading volumes have lagged. This last claim seems to be evidenced by the data, which suggests a turnover ratio of 0.28 in 2014 declining to 0.21 in 2017 (see Figure 14).[9]

Figure 12: APAC G3 secondary market trade and ISIN Count (Trax)



Source: ICMA analysis using Trax data

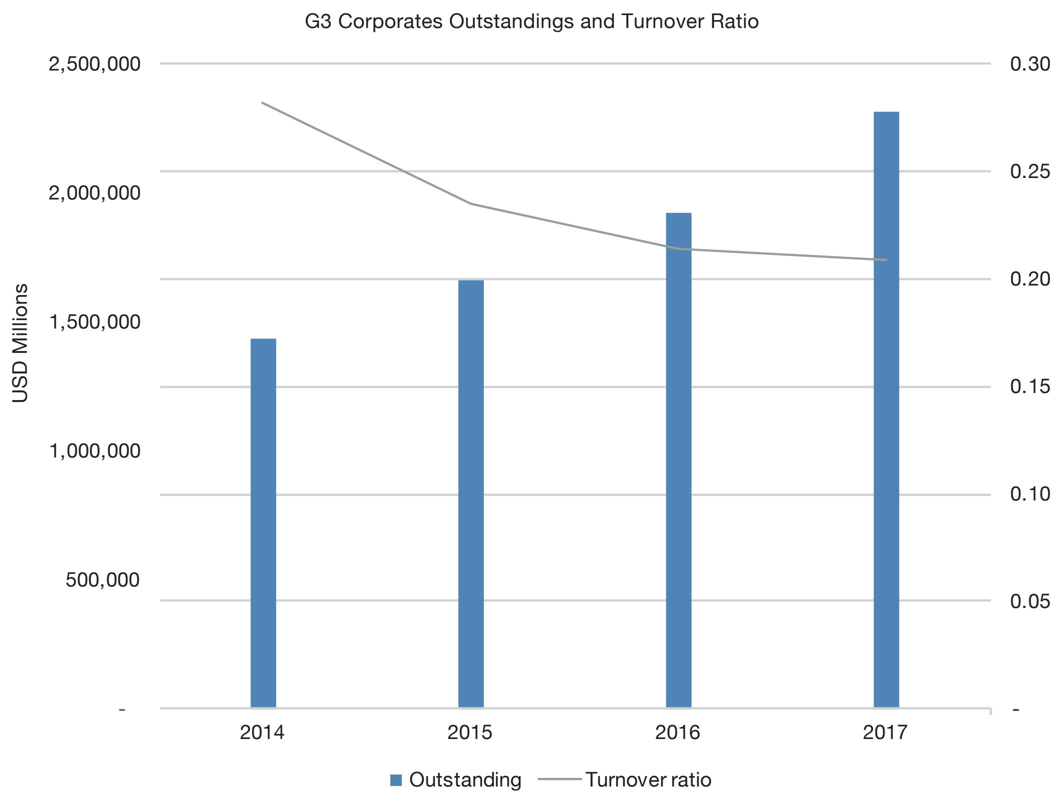
Figure 13: APAC G3 secondary market quarterly and daily average trading volumes (Trax)



Source: ICMA analysis using Trax data

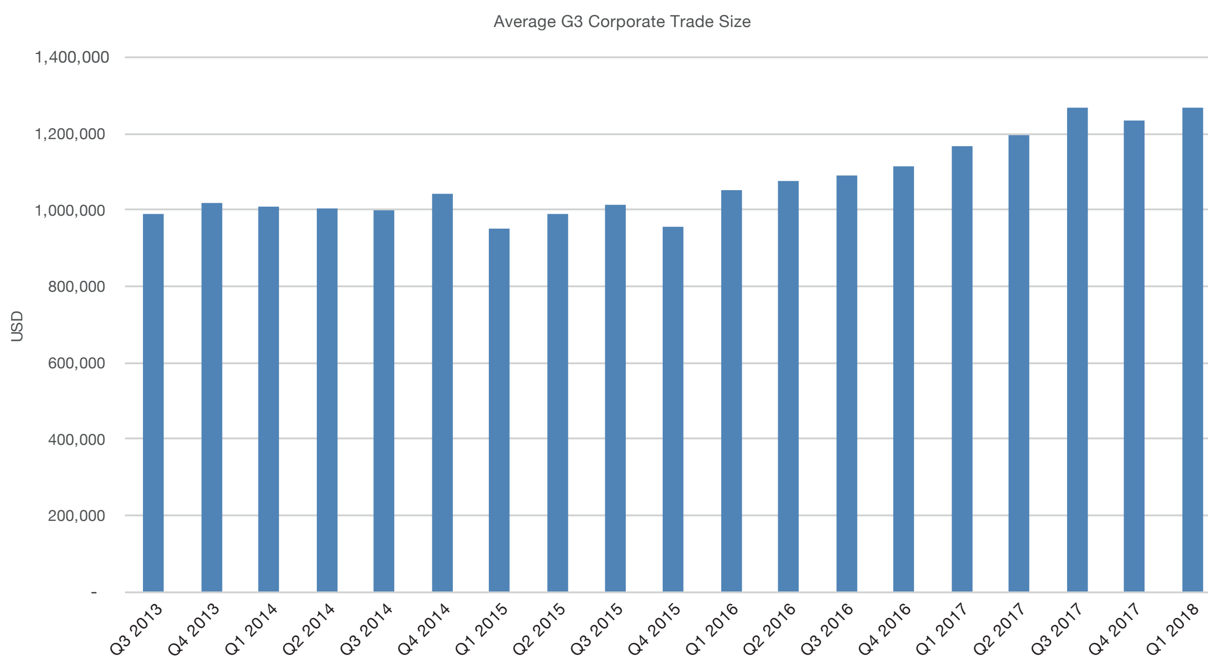
9 Turnover ratio is estimated by dividing annual secondary market trading volumes (Trax) by median annual outstanding underlying market size (Bloomberg).

Figure 14: APAC G3 secondary market turnover ratio



Source: ICMA analysis using Trax and Bloomberg data

Figure 15: APAC G3 average secondary market trade sizes (Trax)



Source: ICMA analysis using Trax data

Data provided by Trax does seem to confirm that since Q3 of 2013 total secondary trading volumes and trade count have remained relatively range bound in the same time that underlying primary issuance has increased, which seems to be reflected in the increase in ISINs traded (see Figures 12 and 13). Meanwhile, the average trade size has only increased slightly from just under USD 1,00mm equivalent to a little more than USD 1.25mm (See Figure 15).

Interviewees who take a less sanguine perspective on liquidity point to a number of possible reasons including the relative small size of the overall market, a propensity for regional investors to hold bonds to maturity, the diminution of hedge fund activity, and low market volatility. Some of these feel that if net new issuance continues to grow, or as markets become more volatile, this should help improve liquidity.

A number of sell-side and buy-side interviewees remarked that recent years have seen many Chinese broker-dealers becoming active in the secondary markets. Participants suggest that as a number of international dealers have retrenched, mainly as a result of increased capital costs, these have been more than replaced by Chinese firms opening operations in Hong Kong. Estimates vary between interviewees but point to at least 40 or more active dealers for regional IG and more than 25 for HY, of which at least half are Chinese firms. Some note that these firms also tend to be quite aggressive in their pricing, appearing to be less capital constrained than their international rivals. Some further suggest that the primary motivation for these firms appears to be to generate volumes, not revenues. However, a number of interviewees maintain that the international broker-dealers still very much dominate secondary market flows across all sectors and credits.

A common theme coming out of the interviews is the relatively opaque nature of the primary allocation process, which in turn potentially impacts secondary market liquidity. Participants point to the increasing number of Chinese banks and securities houses leading new issues of Chinese corporates and targeting Chinese investors. While Chinese issuance has increased over the past few years, expanding the overall market, much of this seems to be placed with a high concentration of Chinese investors, which are predominantly buy-to-hold, and many of these bonds do not find their way into the secondary market.[10]

10 In this respect ICMA has published certain materials that seek to demystify the primary allocation process in a more European context, notably: #13-18 in the ICMA Primary Market Handbook's Appendix 12 (available to subscribers / ICMA members), #19-40 in ICMA's 2014 FEMR response and #55-56, #63 in ICMA's 2011 MiFID Level 1 consultation response and #7, #9, #28/29 and #33 in ICMA's 2014 MiFID Level 2 consultation response. These specifically acknowledge the potential significance of an investor's perceived 'buy-to-hold' or 'trading' status in the context of allocation decisions.

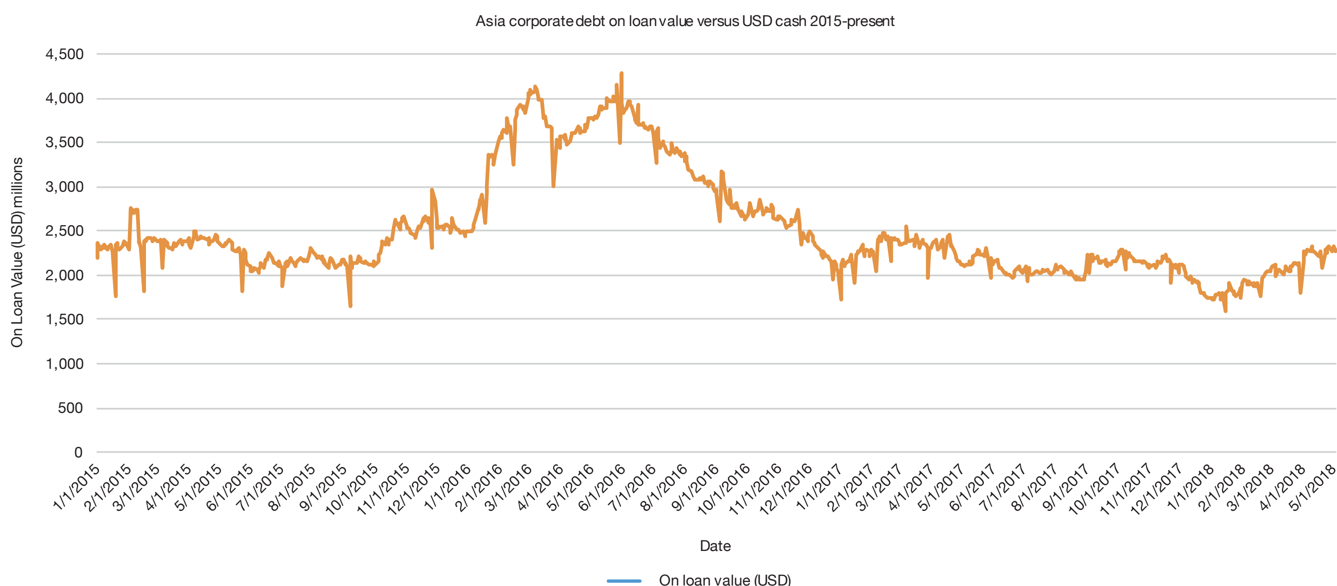
Chapter 3: Repo and securities lending

A common topic raised by both sell-side and buy-side firms is the lack of development in underlying repo and securities lending markets for APAC G3 credit. To a large extent this seems to limit secondary market growth and activity. Participants explain that many regional investors do not lend their holdings back into the market, and that supply is largely contingent on hedge funds and international real money investors. What supply there is tends to be routed via the London credit repo desks of international banks, with cost and stability being a major concern for borrowers.[11] Market-makers therefore often struggle to find repo liquidity to allow them to short-sell, which restricts offer-side liquidity.

Given repo market bottlenecks, it would seem that settlement fails are quite common, a structural characteristic of the market that divides buy-side participants. Some accept that the only way to access liquidity in the bonds and exposures they require is to have a degree of tolerance for settlement fails. As one participant explained, the alternative is to have a 'long only' market, which does not really work from the perspective of liquidity provision. Others, however, take a zero-tolerance view on settlement fails, and select their liquidity providers on this basis. It is not unusual for buy-side firms to ask their broker-dealers whether their offers are against inventory and only trade on this basis. Some participants noted that buy-ins do exist in the market, but are extremely rare, with firms either accepting settlement fails as a natural market phenomenon or insisting on effective guaranteed delivery.[12]

In terms of data, it is very difficult to source an aggregated overview of the size and activity of the APAC G3 credit repo and securities lending markets. However, the BondLend platform is one of the most widely used credit repo/securities lending platform for major currencies and can be used as a good proxy for overall market trends. Figure 16 suggests a notable uptick in borrowed volumes in the first quarter of 2016 and normalising in the second quarter. This would seem to reflect market direction and corresponds with a widening and subsequent correction of credit spreads during this period (see Figure 26). Otherwise, another observation is that outstanding borrow since the start of 2017 has been relatively static, despite the growth in the outstanding underlying bond market. Again, this would seem to be a function of market volatility and consistent with underlying secondary market activity (see Figure 13).

Figure 16: BondLend Asia corporate debt on loan vs USD



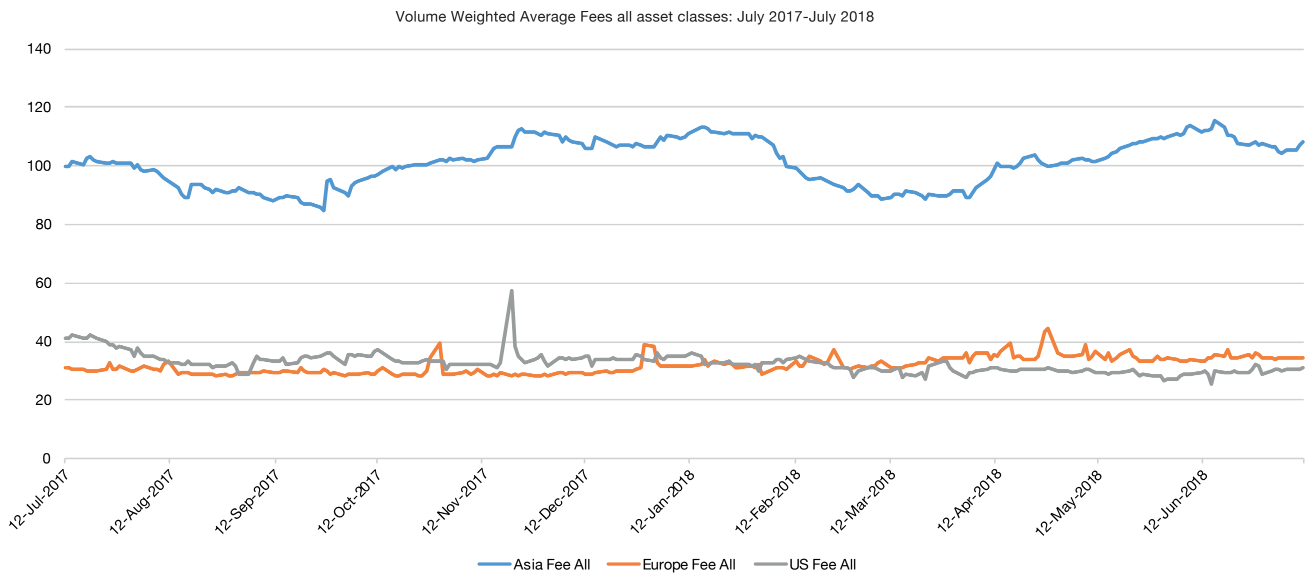
Source: DataLend

11 One sell-side respondent suggested that rates are typically around 100bp-200bp for IG and 300bp-500bp for HY, but can easily jump a lot higher (Noble bonds, by way of example, were 1200bp at the time of the interview).

12 At the time of the interviews, there was little or no awareness of the potential consequences of CSDR mandatory buy-ins on the APAC cross-border corporate bond market.

Figure 17 highlights the relative expensiveness of borrowing Asian corporate bonds compared to the European and US credit repo markets.

Figure 17: BondLend volume weighted average borrow fees for Asia, Europe, and US corporate bonds



Source: DataLend

Chapter 4: Credit default swaps

ICMA's work on European corporate bond markets highlights stakeholders' assertion that bond market liquidity and liquidity conditions in the underlying credit default swap (CDS) market, in particular for single name CDS (SN-CDS), are highly correlated. The interviews for this report similarly seem to suggest that a lack of development in the APAC SN-CDS market may be a constraint on liquidity in the regional cross-border corporate bond market.

Respondents report that there is generally little interest from investors in corporate SN-CDS, either as a hedging instrument or an alternative investment vehicle, particularly with the diminution of hedge fund involvement in the regional market. Market-making capacity is accordingly limited, and activity low. It also seems that while there is some liquidity in IG names, particularly those in the index, getting into a position may be possible, but trading out of positions can be far more difficult. Some note that a low spread volatility environment is also an underlying factor, with little incentive for investors to hedge their risk, nor for banks to allocate capital to supporting market-making. The recent adverse press coverage of the Noble 'default' is also cited as raising participant concerns around the efficiency and reliability of the instrument.[13] However, in the latter rounds of interviews, one participant observed increased interest in SN-CDS from bank credit valuation adjustment (CVA) desks during the recent uptick in volatility.[14]

Figure 18: Asian Single-Name CDS gross notional outstanding and number of contracts

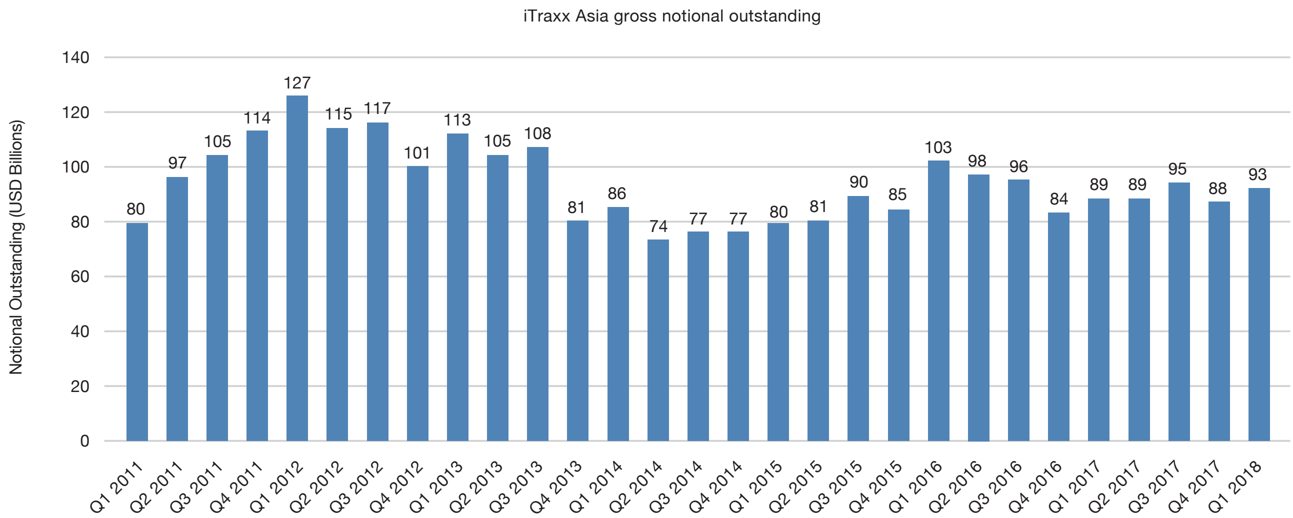
Source: ISDA analysis based on TIW data

Some interviewees suggest that liquidity in the corporate SN-CDS market had been relatively good prior to 2008, certainly for IG names, and even for HY there were usually around 10 or more active names. However, post-2008, the market fell into steep decline, particularly for HY names, and by around 2012-2013, when legacy contracts rolled-off,[15] activity saw another drop. The cessation of the Asia iTraxx HY index also seems to have played a major part in the diminution of the HY SN-CDS market.

Participants do comment, however, that liquidity in the index (Markit iTraxx Asia Ex-Japan) is relatively good, with decent depth and tight spreads, and that participants tend to rely on this as a useful macro-hedging tool, rather than managing individual credits. A number of interviewees also comment that the regional sovereign CDS market works well and has grown in recent years.

13 The controversy related to the determination of the Noble CDS 'default' is discussed in ICMA's 2018 paper, The European Corporate Single Name Credit Default Swap Market
14 CVA desks manage banks' credit exposure arising from counterparty risk.
15 Most SN-CDS activity (and liquidity) tends to be in 5-year contracts.

Figure 19: iTraxx Asia gross notional outstanding



Source: ISDA analysis based on TIW data

More detailed analysis of the Asia CDS market, kindly provided by ISDA, can be found in Annex I of this report.

Chapter 5: Financial and market regulation

Local regulation appears to have little impact on the regional cross-border market and raises few concerns among interviewees. Rather, it is global regulatory reforms (or those affecting US and European based firms) that have indirectly had the biggest bearing on the market: in particular, Basel III and MiFID II/R.

Basel III

A number of interviewees reflect that the increased capital costs imposed on larger global banks have made it more expensive, and so more difficult to run large trading books. Meanwhile, local banks and securities houses, in particular the Chinese firms, do not appear to have been impacted in the same way as for US or European firms, possibly because many were already well-capitalised, and so for some this feels as if it has created an uneven playing field, allowing local market-makers to be far more aggressive than their more global competitors.

MiFID II/R

The interviews straddled the implementation of MiFID II/R in Europe, and this was a popular discussion point for interviewees. The larger international firms, with a European presence, seemed to be more comfortable with the roll-out of the regulation, and more aware of its extraterritorial impacts. A number had already taken an approach of 'globalising' its requirements since this was more practical from an implementation perspective. However, many regional firms seemed more anxious about the scope and application of the regulation. Issues that seemed to cause the most confusion included data and information required by EU counterparties, the implications of distributing research into the EU, and in particular the requirement to sign new terms of business with EU counterparties. One regional interviewee stated that they had simply stopped trading with MiFID regulated firms since this was easier.

A number of respondents suggested that MiFID II impacts would most likely be felt indirectly in the region in the form of local regulators adopting elements of it into their own regulatory frameworks. It would seem that a number of APAC authorities are considering introducing policies related to post-trade transparency and best execution, and are therefore closely monitoring the impacts of MiFID II for European market transparency and efficiency.

Chapter 6: e-trading and technology

While in many respects the Asia region leads the US and Europe in terms of financial technological innovation and adoption, the interviews, for the most part, point to a relatively slow uptake of trading platforms in the cross-border bond markets. The major global incumbent platforms also tend to lead in the APAC markets, with a handful of international and regional platforms carving out geographical and product niches. However, overall levels of e-trading, at least anecdotally, appear to be low compared to the US and Europe, with estimates of overall e-trading volumes in the range of 10-40% of secondary market activity.

To a large extent, this seems to be a function of market size and liquidity. Many explain that trying to execute large trades on venues would result in information leakage and distort the market. A number of both sell- and buy-side respondents suggest that platforms are helpful in terms of price formation, and knowing who might be axed, but otherwise trades are generally negotiated and executed ‘over the counter’ (OTC). It would also seem that it is quite common practice to agree trades OTC before ‘consummating’ them on a venue to benefit from the straight through processing (STP) efficiencies of e-trading. As one platform explained, trades on venues tend to be very small (below USD 1mm) or relatively large (above USD 5mm).

A number of respondents highlighted that much of the reticence to move onto venues can be explained by cultural inclination. Asian markets, traditionally, have had heavy reliance on relationships and trust, and picking up the phone to trade is an entrenched practice. Some interviewees reported that social media and personal chat ‘apps’ are now also widely used to negotiate trades. Knowing your counterparty seems to underpin liquidity, and as one interviewee framed it, the regional bond markets are essentially a ‘human dark-pool’. Another perspective is that historically salespeople have been a vital element of market structure and they are reluctant to give up their prominence (and sales credits) to technology.

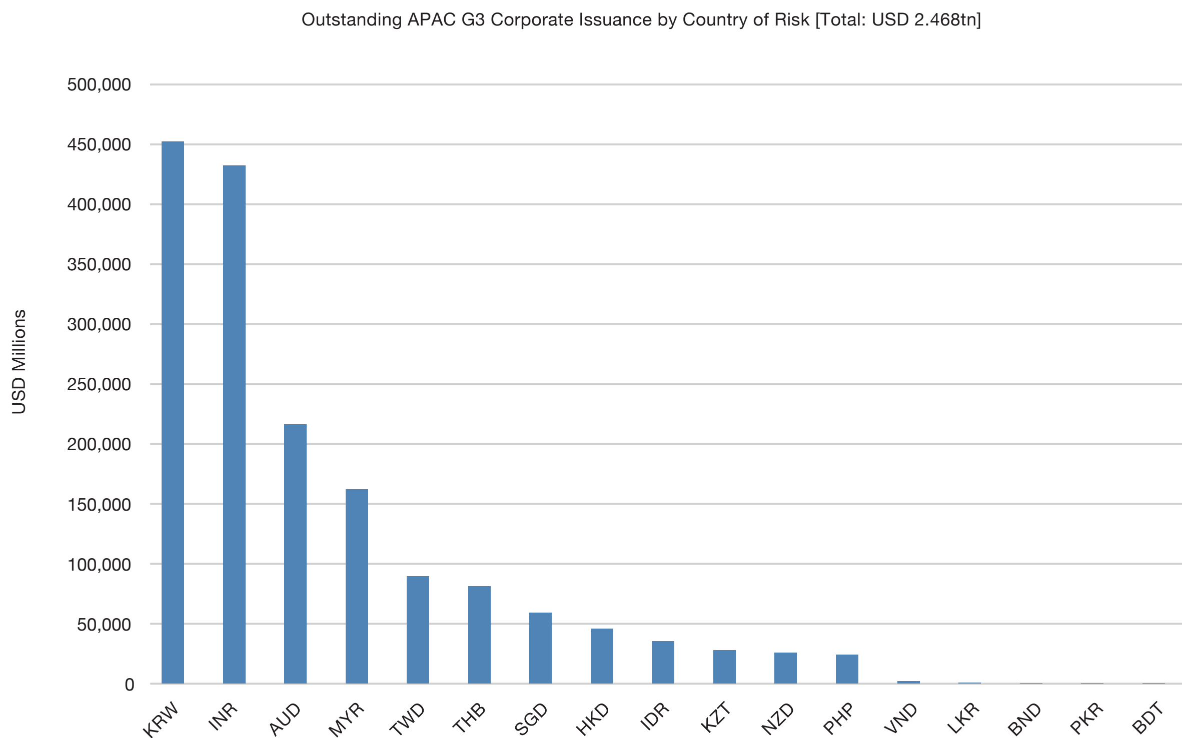
But many of the interviews also suggest that this reluctance to embrace e-trading may be changing. Apart from efficiencies, some fund managers are starting to look to venues to source liquidity. One respondent suggested that regional firms have become used to e-trading as a result of the US Dodd-Frank rules forcing them onto swap execution facilities (SEFs) and so trading bonds on platforms seems more natural. Indirectly, the reporting and audit requirements of MiFID II are also forcing firms to move more business onto venues, while other interviewees report that cost pressures on many banks are forcing them to down-size their sales teams and with this looking to support low-touch liquidity via platforms.

Some firms, however, both global and regional, seem to be far more embracing of new technologies and appear to be restructuring their business models around greater automation and, quite critically, enhanced data capture. The ability to process and leverage proprietary order and trading data is seen by many as providing a potential competitive edge. As one respondent explained, order management systems (OMS) are in many ways more important than trading venues themselves, while capturing data from voice and ‘chat’ (‘digitalisation’) is equally pertinent. But while some respondent firms are clearly pushing to electronify as much of their trading activity as possible, others feel that the market will ultimately become a hybrid model, with relationships and human interaction remaining important. As one interviewee pointed out, platforms are only as good as the prices that participants put on them: when the screens go blank you need to know who to call.

Chapter 7: Local currency markets

While the scope of this report is not intended to focus on local APAC markets, the researchers are interested in local currency (LCY) markets to the extent that they are 'internationalising', and this featured as a prominent theme in many interviews. For the most part, however, it would seem that LCY corporate bond markets are heterogenous in structure and participants, and often difficult to access. A number of participants cited Korea and India as being large, potentially interesting credit markets, but not the easiest in which to operate from an offshore perspective. Others also noted that liquidity is another important factor, and that USD denominated issues usually have tighter bid-ask spreads and more market depth than the LCY denominated bonds of the same issuer. Some, however, see opportunities being driven by currency-basis, although here access to the FX market also becomes a key consideration. A number of respondents stated that the SGD and HKD markets had become less relevant from an international investment perspective, while others suggested that the Indonesian corporate bond market was becoming more interesting.

Figure 20: Outstanding APAC LCY corporate issuance (ex-China and Japan) (May 2018)



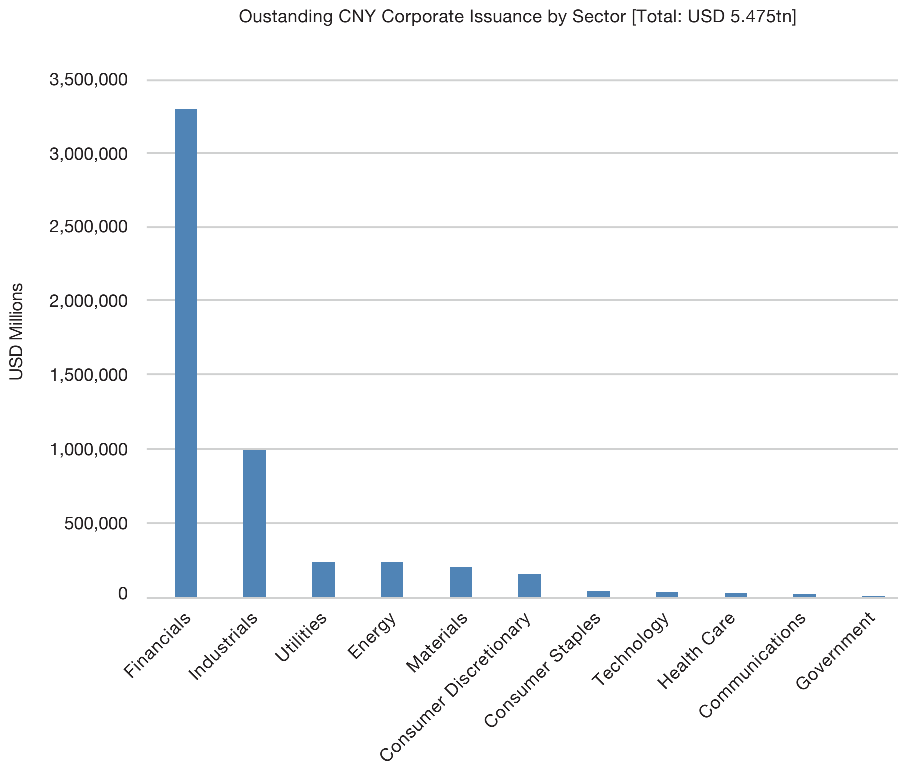
Source: ICMA analysis using Bloomberg data

China

The LCY market that was a key theme in most of the interviews, however, is the Chinese corporate bond market, and its ongoing internationalisation. China's corporate bond market (including financials) stands at almost USD 5.5tn nominal value, of which roughly USD 2tn is non-financial corporate (NFC) issuance (see Figure 21), making it the second largest domestic corporate bond market.[16] For a market that scarcely existed ten years ago, domestic corporate issuance has surged, particularly since 2013, with total gross new issuance exceeding USD 4tn in 2017 (see Figure 22), which much of the issuance being driven by domestic banks (see Figure 23).

16 By way of comparison, the US corporate bond market is approximately USD 8.3tn (including financials) and the EU28 corporate bond market is approximately USD 4.8tn (including financials).

Figure 21: Outstanding CNY corporate issuance by sector (May 2018)



Source: ICMA analysis using Bloomberg data

Figure 22: CNY corporate bond issuance

Source: ICMA analysis using Bloomberg data

Figure 23: Largest outstanding CNY corporate issue tranches

Issuer Name	Cpn	Maturity	Curr	Amount Issued	Issue Date	USD equiv (mm)
China Construction Bank Corp	4.75	PERP	CNY	9,166,860,000	26/12/2017	USD 1,432
Agricultural Bank of China Ltd	4.99	20/12/2027	CNY	8,019,350,000	20/12/2012	USD 1,252
Industrial & Commercial Bank of China Ltd	5.5	30/12/2026	CNY	7,936,900,000	30/12/2011	USD 1,239
Agricultural Bank of China Ltd	5.3	07/06/2026	CNY	7,714,850,000	07/06/2011	USD 1,205
Shanghai Pudong Development Bank Co Ltd	0	21/05/2018	CNY	7,286,767,840	21/11/2017	USD 1,138
China CITIC Bank Corp Ltd	4.2	17/04/2020	CNY	7,273,350,000	17/04/2017	USD 1,136
Industrial & Commercial Bank of China Ltd	4.5	PERP	CNY	7,045,245,000	23/11/2015	USD 1,100
Bank of Communications Co Ltd	3.9	PERP	CNY	6,737,355,000	02/09/2016	USD 1,052
Industrial & Commercial Bank of China Ltd	4.45	22/11/2027	CNY	6,663,844,000	22/11/2017	USD 1,041
Industrial & Commercial Bank of China Ltd	4.45	08/11/2027	CNY	6,643,120,000	08/11/2017	USD 1,037

Source: ICMA analysis using Bloomberg data

Bond Connect

In July 2017, the Bond Connect program was launched under the supervision of the PBoC and the Hong Kong Monetary Authority (HKMA), providing a mechanism for international investors to access China's onshore bond markets (as well as, at a later stage, for Chinese investors to access the international bond markets) via the Hong Kong Stock Exchange. This provides an alternative and, in theory, more efficient route to access the onshore market to the existing foreign institutions' scheme for the China Interbank Bond Market (CIBM scheme) and Qualified Foreign Institutional Investor (QFII) registration systems (see Annex II).

At the time of the interviews, Tradeweb was the only offshore trading venue connected to Bond Connect, although Bloomberg was about to receive approval and MarketAxess was in advanced discussions with Bond Connect, with other platforms also seeking connectivity. Market participation in Bond Connect has grown steadily since launch. As of June 2018, there were 356 approved investors from 21 jurisdictions (see Figure 24), with average daily volumes reaching CNY6.55 billion under Bond Connect, nearly double the volumes in May [2017].

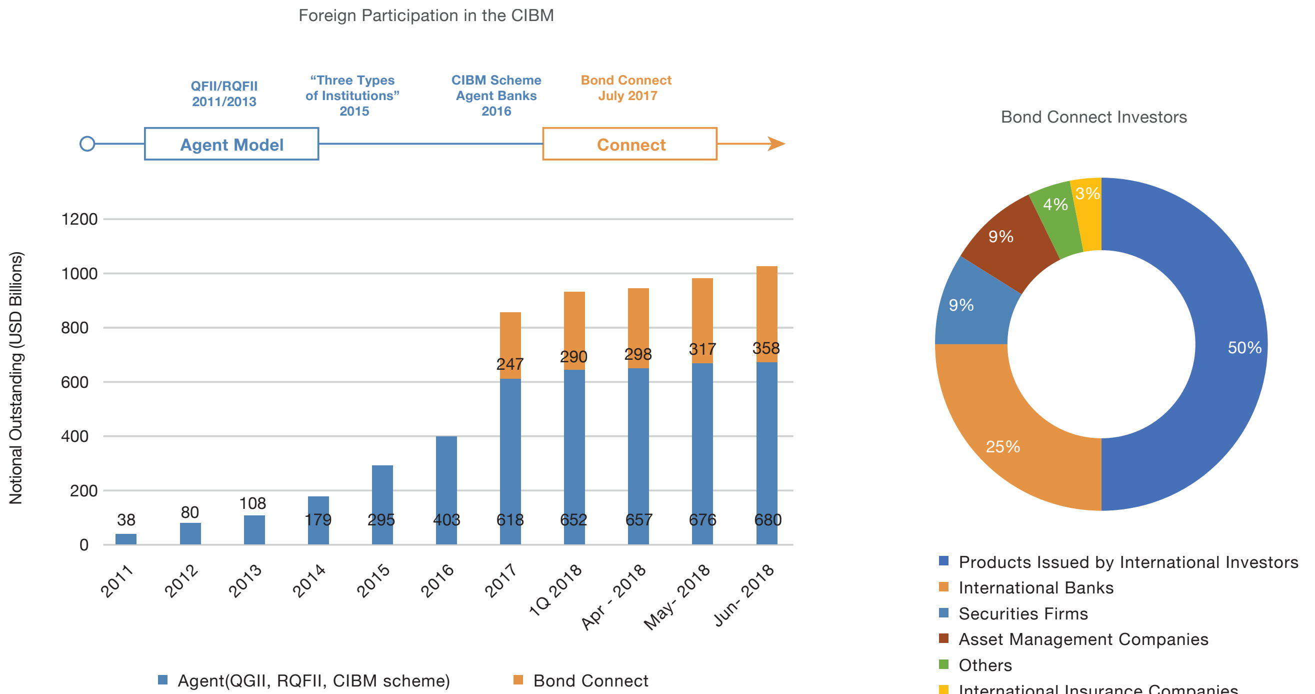
The interviews provide practical, if sometimes mixed, perspectives on both the Bond Connect platform and the potential for internationalising the Chinese corporate bond market. Many respondents felt that longer term the opening up of the Chinese market would provide interesting opportunities for international investors, and that interest will be expedited by the eventual inclusion of China in global bond indices,[17] prompting passive as well as active 'northbound' flows (i.e. from Hong Kong into mainland China). However, some expressed reservations in the shorter-term.

Concerns include the difficulty in sourcing information for evaluating the underlying credits, particularly as local agency ratings tend to be overly sanguine and largely perceived to be unreliable (see Figure 25). There is still a fair amount of uncertainty around Chinese bankruptcy and tax laws, and less confidence that the national authorities will step in to support failing companies. Some note that much of the issuance is financial, where there are concerns about transparency of balance sheets and excessive leverage, with not enough supply of true corporates. Others raise issues related to lack of market depth and liquidity, as well as stretched valuations. Currency movements (USD/CNY) are also expected to have a major influence on investor flows.

Some interviewees highlight potential limitations of the Bond Connect platform from the perspective of international investors. These include a relatively cumbersome documentation process for registering and opening of accounts, language barriers in the instruction and confirmation process for trades, a delay between the payment of cash and the receipt of bonds, a lack of functionality for assigning block trades at the sub-account level, the inability to transact repos, and uncertainty around taxation policy. However, despite these challenges, traction since launch has been good, foreign inflows into the Chinese bond markets have accelerated, and between end-June 2017 and June 2018, total foreign holdings of onshore assets have increased by 83% from CNY 842.5bn to CNY 1,545.8bn.[18]

17 In March 2018, the Bloomberg Barclays Global Aggregate Index announced plans to include Chinese government and policy bank bonds, starting from April 2019
18 Source: Bond Connect website (http://www.chinabondconnect.com/en/market-data.htm)

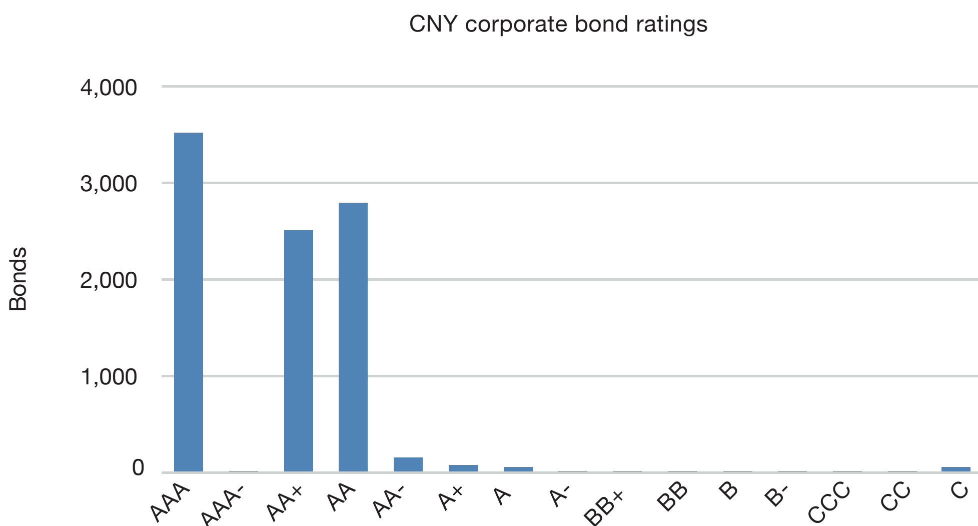
Figure 24: Institutional investors' adoption of bond connect



Source: Bond Connect Company Limited, China Foreign Exchange Trade System

Furthermore, since the interviews for this report, the PBoC has outlined plans to address many of the highlighted concerns. On July 3 2018, the PBoC announced new measures to support the development of the Bond Connect scheme, including: the expected launch of trade allocation full realisation of the delivery versus payment settlement system soon; clarification of tax policy for overseas investors as soon as possible; allowing international investors to access repo and derivatives markets; addition of more Bond Connect dealers; discounts in Bond Connect transaction fees; and cooperation with mainstream international e-trading platforms.[19]

Figure 25: Chinese domestic credit ratings of rated CNY corporate bonds



Source: ICMA analysis using Bloomberg data

19 Announced on July 3 2018 by Mr. Pan Gongsheng, PBoC Deputy Governor and Administrator of State Administration of Foreign Exchange of China: https://www.hkex.com.hk/News/News-Release/2018/180703news?sc_lang=en

Chapter 8: Looking forward

In the interviews, participants were asked to provide forward looking perspectives on the APAC cross-border corporate bond market, and to identify what they thought would be the prominent themes.

The dominance of China?

The continued dominance of China, both from an issuance and investor perspective is a prevalent view, with some noting that it is easier, with fewer restrictions, for Chinese firms to issue offshore, while Chinese investors still hold a significant amount of USD. Some feel that regional issuers from other countries (in particular India and Indonesia) would also be drawn to the international USD market, while investment flows from international emerging market funds will likely increase.

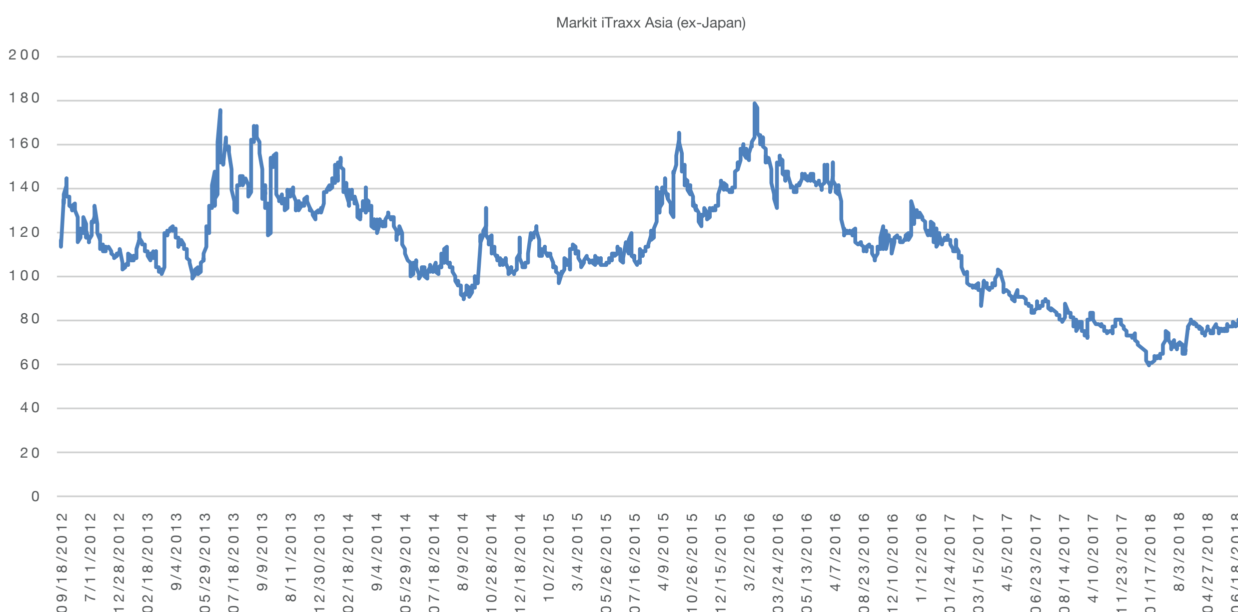
A turning credit cycle?

Many, however, felt that the demand-supply skew will correct, as monetary policy in the US and Europe tightens and global yields move higher. A number of interviewees, particularly in the later round, felt that this adjustment was already underway, noting increased volatility, a shortening of duration by investors, and widening credit spreads. The broad feeling, however, was that valuations in the credit markets remain stretched, and that a significant correction is in the offing. One participant noted that 'AA' spreads below 100bp and 'BBB' spreads in the low 100s are unsustainable (see Figure 26). A common concern relates to the prospect of defaults, with some noting that many of the Chinese corporates (mostly financial or property based) that have swelled issuance in recent years carry significant leverage. It is further noted that a large part of the new issuance is being driven by Chinese Local Government Funding Vehicles (LGFVs),[20] following the relaxation of regulations by the Chinese central government since 2016, making it easier to issue in the offshore markets. This has created a large pipeline for future issuance of debatable credit quality.

Investor leverage?

Some interviewees also expressed concerns around levels of investor leverage, particularly with respect to Chinese private banks, asset managers, and securities firms, suggesting that this could exacerbate any correction. One participant pointed to a recent increase in leveraged structured products (such as credit linked notes referencing bank alternative tier 1 bonds) aimed primarily at Chinese investors. Other respondents suggested that deleveraging was already underway, and that this was driving volatility on more liquid credits as investors fund margin calls against less liquid holdings.

Figure 26: Markit iTraxx Asia (ex-Japan) investment grade index[21]



Source: ICMA analysis using Bloomberg data

20 LGFVs are generally government owned enterprises engaged in the construction or the operation of infrastructure projects.

21 The Markit iTraxx Asia ex-Japan Investment Grade index comprises 40 equally-weighted investment grade CDS index of Asian entities. All entities meet certain criteria as defined in the Index Rules. The composition of each Markit iTraxx index is determined by the Index Rules. Markit iTraxx indices roll every 6 months in March & September.

Opening up of LCY markets?

Many interviewees are optimistic about the continued opening and internationalisation of LCY markets, in particular the CNY market. While some note operational challenges in investing in China (see Chapter 7), the general view is that the CNY corporate bond market offers potential opportunities, and that with the inevitable inclusion of China in global bond indices, and the expansion of internationally recognised credit rating agencies in the onshore market, 'northbound' investment flows could become significant.

Regulation

Some interviewees feel that increased and more harmonised market regulation across the region is both likely and welcomed, particularly from the perspective of increased transparency. Although some express worry that a sudden and aggressive push toward greater post-trade transparency could be detrimental to the regional G3 market, deterring market-makers, particularly in light of the market's relative illiquidity.

Other developments

Other forward-looking discussion themes include the likely increased traction for e-trading on both incumbent and new trading platforms, and the latent potential for the development of the regional corporate bond ETF market.

Conclusion

The Asia Pacific G3 (USD, EUR, GBP) cross-border corporate bond market has grown significantly over the past five to six years, and currently stands at almost USD 2.5tn in nominal value, including financial issuers, and just over USD 900bn in terms of non-financial corporates. In the same time, annual corporate issuance has more than trebled to over USD 930bn in 2017. Issue sizes have also become larger, with more marquee issues coming to market, and less reliance on 144A tranches. Much of the increase in issuance has been driven by Chinese onshore financial and non-financial corporates. In terms of demand, China is also a key part of the story, with the offshore offices of Chinese investment firms and securities firms, as well as Chinese private banks, providing most of the appetite for Chinese USD issuance.

The interviews paint a mixed picture on secondary market liquidity, which appears to be a relative concept. Some respondents feel that liquidity is generally pretty good, while others posit that the market is traditionally a buy-to-hold market, and so inherently illiquid. However, it would seem that to the extent that liquidity is healthy, it is skewed heavily to investment grade issuance, as well as to the bid-side of the market, while the interviews and data suggest that secondary market activity has lagged the overall growth in market size. In terms of liquidity provision, again China is an important part of the story, with an influx of Chinese broker dealers filling the gap as some international banks scale back their trading activity.

Both repo and SN-CDS markets remain under-developed, which seems to have a direct impact on the ability for dealers to provide liquidity. Respondents feel that improvements in both financing and hedging markets would help secondary market liquidity and boost activity. Short-selling is particularly difficult, not least since many regional investors have a low tolerance for settlement fails.

In terms of regulatory impacts, these are mostly imported from US and European regulation. Basel III has put pressure on the balance sheets and trading books of international banks, as has the Volcker Rule, while MiFID II/R is being 'globalised' by a number of European and international investment firms. Perhaps more significantly, regional regulators appear to be watching the impacts of MiFID with a view to introducing their own regulatory initiatives around transparency and best execution.

The adoption of e-trading in the market seems to be a two-speed process. While a number of banks and asset managers are trying to move as much business as possible onto trading platforms, there is a cultural reticence among many to move away from OTC trading. Relationships and personal trust are deeply ingrained in Asian markets, and so full electronification of the market could take time. For the most part, platforms are either used to identify axes or to process bilaterally agreed trades. However, for some, the means of trading are irrelevant, and the focus is more on digitalising the order and trading process with a view to enhanced data capture.

The internationalisation of LCY markets in the APAC region is of key interest to interviewees, in particular the opening up of the CNY domestic corporate bond market. While there remain a number of barriers to entry, in particular concerns around the transparency of issuers' balance sheets, the absence of reliable credit ratings, and uncertainty around Chinese bankruptcy and tax law, the general view is that international inflows into the CNY bond markets are set to accelerate. The inclusion of China in international bond indices will only help to expedite these flows.

Looking forward, many believe that China will remain the most important part of the story, in terms of USD issuance, investment, and intermediation, as well as the ongoing internalisation of its onshore CNY market. Other LCY markets are also expected to become a more prominent part of the cross-border corporate bond market. There are broad concerns of a potential marked correction in the near future, with participants citing unsustainable credit valuations, excess leverage, and the turning of the rate and credit cycle. However, the longer-term outlook for the APAC cross-border corporate bond markets would seem to be mostly positive, with plenty of opportunities for investors, intermediaries, and issuers.

Acronyms used in this report

APAC	Asia Pacific
CCDC	China Central Depository and Clearing Company
CDS	Credit Default Swap
CFETS	China Foreign Exchange Trading System
CIBM	China Interbank Bond Market
CMU	(HKMA) Central Moneymarkets Unit
CNY	China Yuan Renminbi
CP	Commercial Paper
CSDR	CSD-Regulation
CSRC	China Securities Regulatory Commission
CVA	Credit Valuation Adjustment
DTCC	Depository Trust & Clearing Corporation
ETF	Exchange Traded Fund
EU	European Union
FX	Foreign exchange
G3	Issuance currencies: USD, EUR, GBP
HKMA	Hong Kong Monetary Authority
HY	High Yield
ICMA	International Capital Market Association
IG	Investment Grade
ISDA	International Swaps and Derivatives Association
ISIN	International Securities Identification Number
LCY	Local Currency
LGFV	Local Government Funding Vehicle
MiFID II	(The second) Markets in Financial Instruments Directive
MiFIR	Markets in Financial Instruments Regulation
MTN	Medium Term Note
NF	Non-Financial (issuance)
NFC	Non-Financial Corporate
OMS	Order Management System
OTC	Over The Counter
PBoC	People's Bank of China
QFII	Qualified Institutional Foreign Investor
RegS	Regulation S (bonds issued for international investors)
RFQ	Request For Quote
RQFII	Renminbi Qualified Institutional Foreign Investor
SAFE	State Administration for Foreign Exchange (China)
SCH	Shanghai Clearing House
SEF	Swaps Execution Facility
SMPC	Secondary Market Practices Committee
SN-CDS	Single Name Credit Default Swap
STP	Straight Through Processing
TIW	(DTCC) Trade Information Warehouse

Annex I: Analysis of the Asian CDS market

ICMA would like to acknowledge the contribution of ISDA to this analysis, in particular that of Olga Roman.

For this study, we used the data from DTCC Trade Information Warehouse (TIW), which provides lifecycle event processing services for approximately 98% of all credit derivative transactions in the global marketplace.[22] The DTCC data captures all trades recorded with the DTCC that constitute market risk activity: trades are recorded only if they result in a transfer of credit risk among market participants. We used a "determination committee region" data field to allocate trades by region.[23]

Our data sample covers the period from the first quarter of 2014 to the first quarter of 2018 for CDS notional outstanding and from the first quarter of 2011 to the first quarter of 2018 for CDS traded notional.

Single-Name CDS Notional Outstanding

Gross notional outstanding of Asian single-name CDS remained relatively flat since the first quarter of 2014.[24] As shown in Chart 1, notional outstanding totalled USD 362.8 billion at the end of the first quarter of 2014, compared with USD 365.4 billion at the end of the first quarter of 2018. The number of outstanding contracts declined from about 45,000 to 33,000 over the same period.

Corporate single-name CDS declined from USD 115 billion at the end of the first quarter of 2014 to USD 53.9 billion at the end of the first quarter of 2018 and accounted for 15% of gross notional outstanding at the end of the first quarter of 2018. Sovereign single-name CDS, on the other hand, increased from USD 227.9 billion to USD 290.3 billion over the same period and accounted for about 80% of gross notional outstanding at the end of the first quarter of 2018.

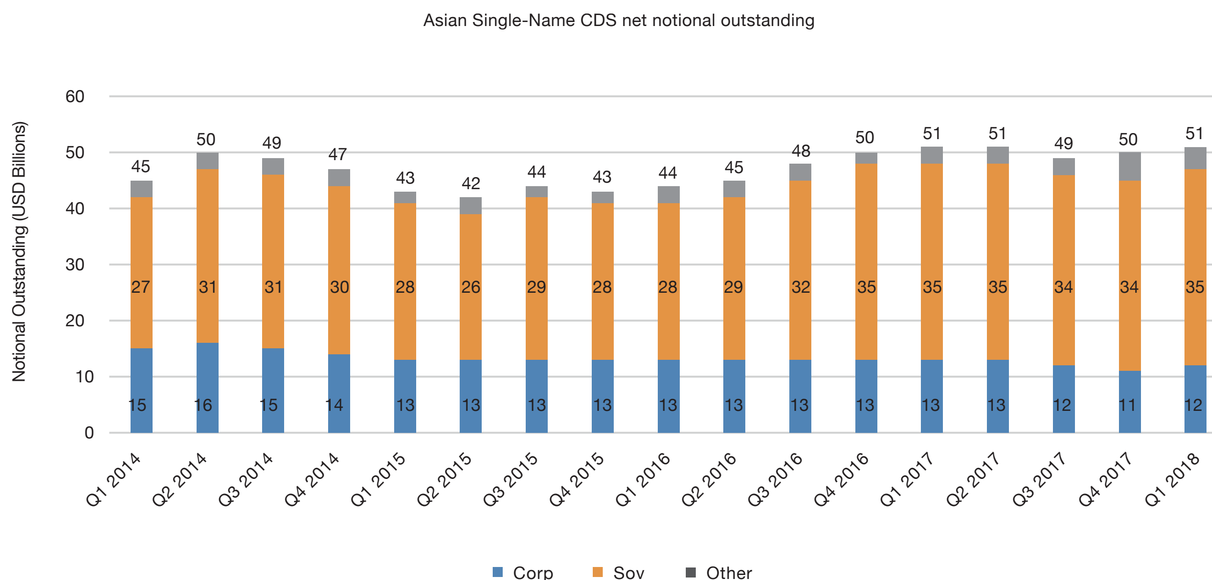
Chart 1: Asian Single-Name CDS gross notional outstanding and number of contracts

Source: ISDA analysis based on TIW data

Net notional outstanding of Asian single-name CDS represented about 14% of gross notional amount at the end of the first quarter of 2018.[25] As demonstrated in Chart 2, net notional outstanding increased from USD 44.9 billion at the end of the first quarter of 2014 to USD 50.7 billion at the end of the first quarter of 2018.

22 http://www.dtcc.com/derivatives-services/trade-information-warehouse
23 This data field identifies the region associated with the predominant trading style associated with each reference entity name, based on the documentation type of the underlying trades.
24 Gross Notional is the sum of CDS contracts bought (or equivalently sold) for all warehouse contracts in aggregate, by sector or for single reference entities displayed. Aggregate gross notional value and contract data provided are calculated on a per-trade basis. For example, a transaction of USD 10 million notional between buyer and seller of protection is reported as one contract and USD 10 million gross notional, as opposed to two contracts worth USD 20 million (See DTCC Explanation on Trade Information Warehouse Data).
25 "Net Notional Values" with respect to any single reference entity is the sum of the net protection bought by net buyers (or equivalently net protection sold by net sellers). The aggregate net notional data provided is calculated based on counterparty family (See DTCC Explanation on Trade Information Warehouse Data).

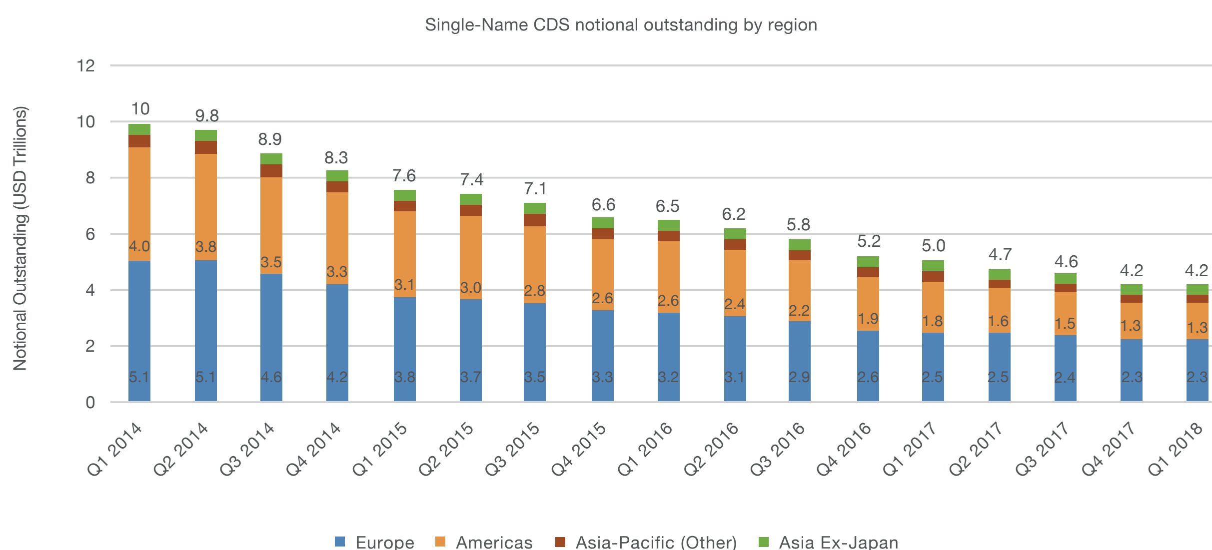
Chart 2: Asian Single-Name CDS net notional outstanding



Source: ISDA analysis based on TIW data

The Asian single-name CDS market remains relatively small compared with other global markets. As illustrated on Chart 3, Asian single-name CDS notional outstanding accounted for only 9% of global single-name CDS notional outstanding at the end of the first quarter 2018. For comparison, Europe and Americas single-name CDS notional outstanding totalled USD 2.3 trillion and USD 1.3 trillion, respectively, at the end of the first quarter of 2018.[26] Total gross notional outstanding in Japan, Australia, and New Zealand (Asia-Pacific (Other) in the below chart) was USD 267 billion at the end of the first quarter of 2018.

Chart 3: Single-Name CDS notional outstanding by region

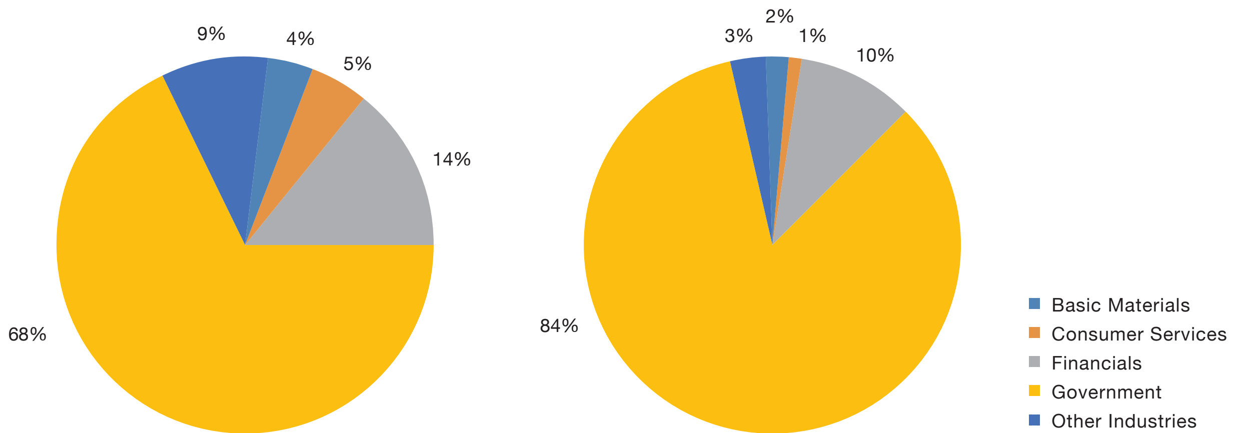


Source: ISDA analysis based on TIW data

As shown in Chart 4, government CDS accounted for the majority of notional outstanding. At the end of the first quarter of 2014, government CDS notional outstanding totalled about USD 245.1 billion and contributed 68% of total Asian CDS notional outstanding. At the end of the first quarter of 2018, government CDS notional outstanding was USD 306.1 billion and represented 84% of total CDS notional outstanding. Financial CDS contributed about 14% of total notional outstanding in the first quarter of 2014 and 10% in the first quarter of 2018.

26 The significant reduction in the CDS notional outstanding in Europe and Americas can be partially attributed to portfolio compression, which is a widely used mechanism to reduce the number of trades and gross notional, but keep the same economic exposure.

Chart 4: Single-Name CDS notional outstanding by sector (Q1 2014 vs. Q1 2018)



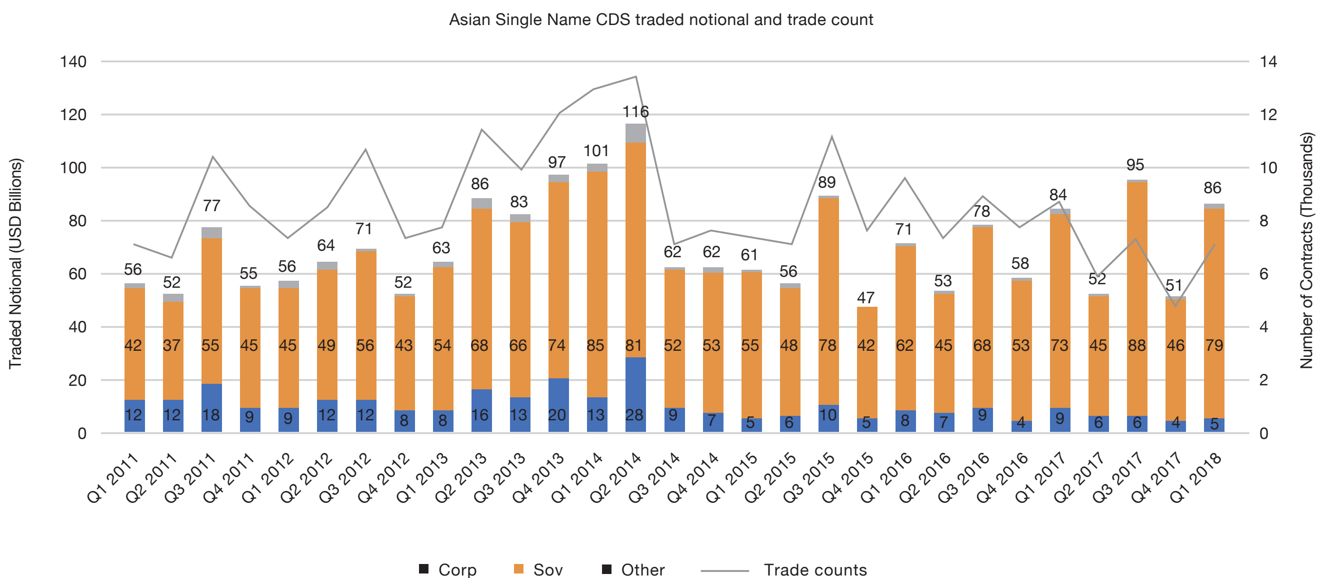
Source: ISDA analysis based on TIW data

Single-Name CDS Traded Notional

Trading activity in the market, as opposed to outstanding notional, presents a more accurate picture of CDS market dynamics. As shown in Chart 5, in the first quarter of 2011, Asian quarterly single-name CDS traded notional totalled USD 56 billion and number of transactions was about 7,100. Quarterly traded notional peaked at USD 116 billion in the second quarter of 2014. In the first quarter of 2018, quarterly traded notional totalled about USD 85.9 billion and the number of contracts was about 7,000.

Corporate single-name CDS accounted for only 6.4% of total traded notional at the end of the first quarter of 2018, representing a significantly smaller share of traded notional compared with the first quarter of 2011, when they accounted for 21% of traded notional. The share of sovereign single-name CDS jumped from 74% of total traded notional in the first quarter of 2011 to 92% in the first quarter of 2018.

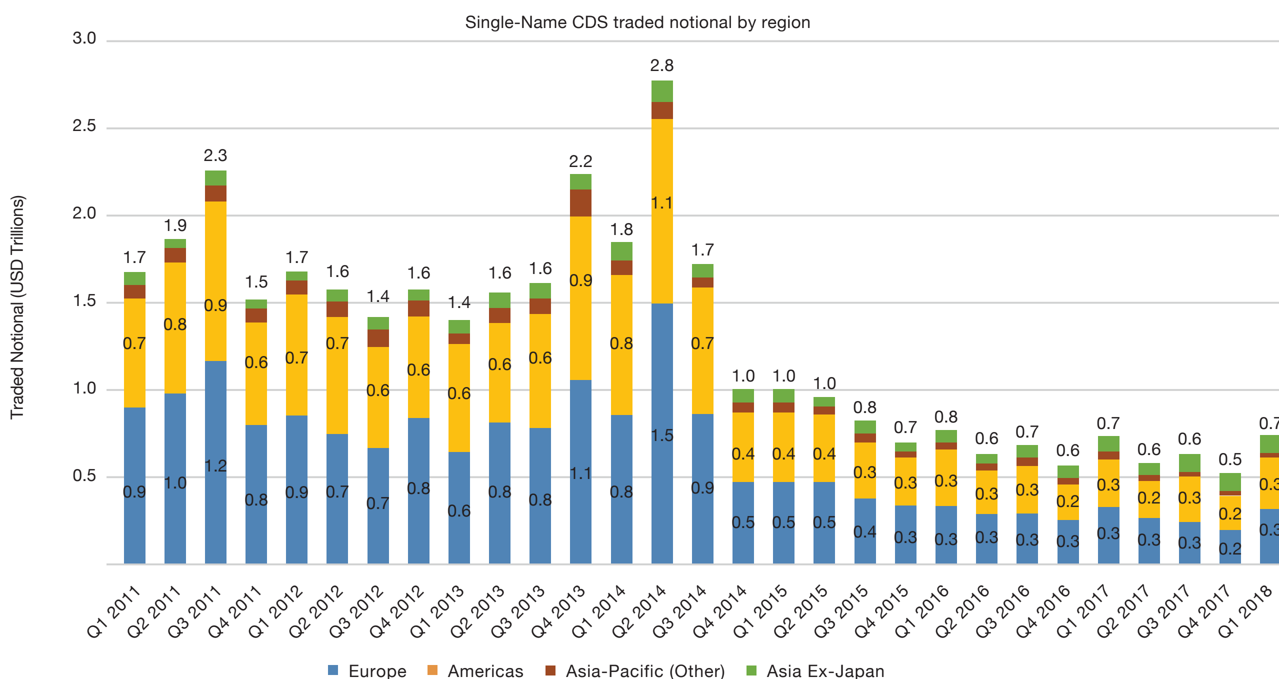
Chart 5: Asian Single Name CDS traded notional and trade count



Source: ISDA analysis based on TIW data

As illustrated in Chart 6, Asian single-name CDS represented about 2% of global single-name CDS traded notional in the first quarter of 2011. The share of Asian single-name CDS grew to about 5.8% in the first quarter of 2018, but still remains relatively small compared with Europe and Americas. Global CDS traded notional shrank from USD 1.7 trillion in the first quarter of 2011 to USD 0.7 trillion in the first quarter of 2018.

Chart 6: Single-Name CDS traded notional by region

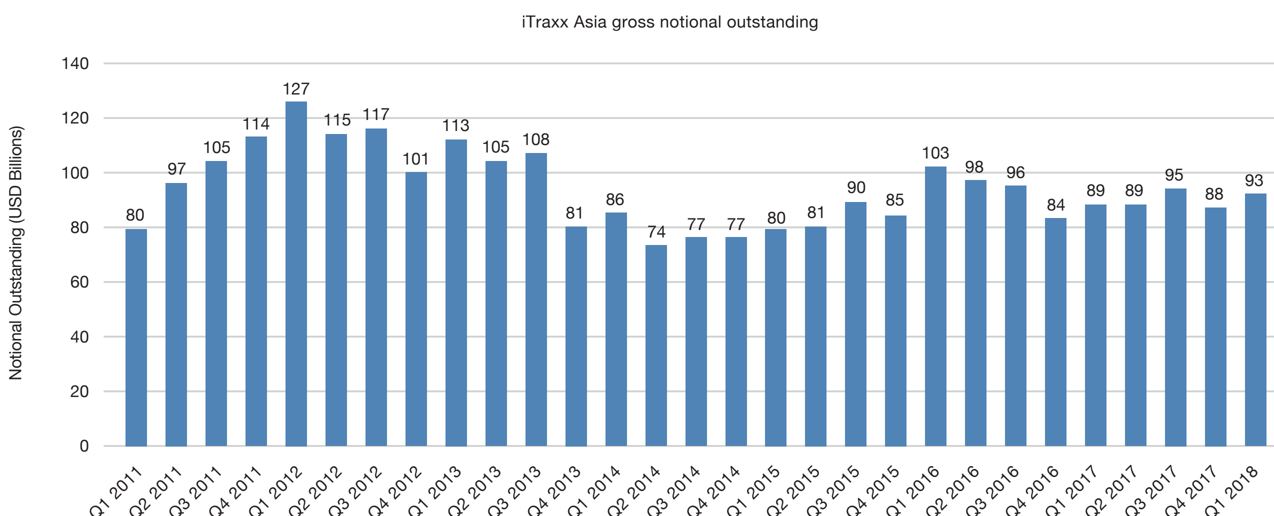


Source: ISDA analysis based on TIW data

iTraxx Asia

Gross notional outstanding of iTraxx Asia totalled USD 92.6 billion at the end of the first quarter of 2018.[27] As demonstrated in Chart 7, notional outstanding jumped from USD 80.2 billion in the first quarter of 2011 to USD 127.1 billion in the first quarter of 2012, declined to below USD 80 billion in 2014 and remained above USD 80 billion since 2015.

Chart 7: iTraxx Asia gross notional outstanding

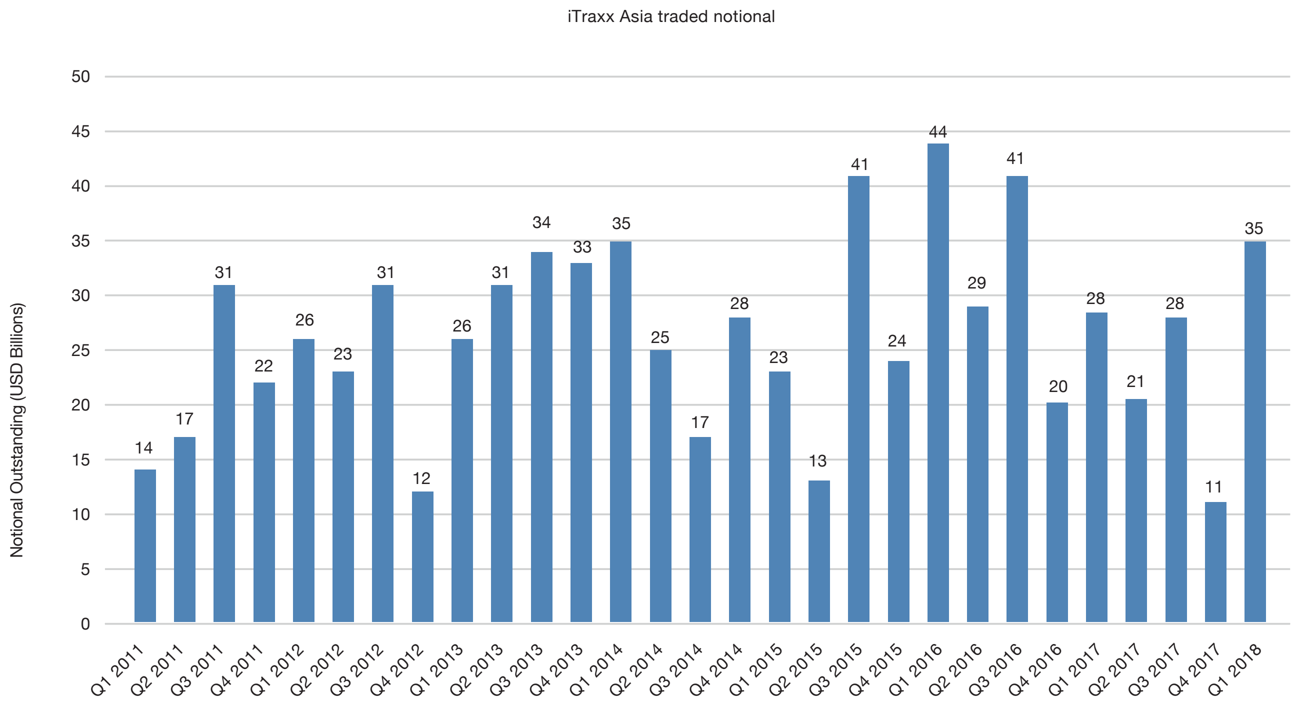


Source: ISDA analysis based on TIW data

ITraxx Asia traded notional totalled USD 35 billion in the first quarter of 2018. As shown in Chart 8, iTraxx Asia quarterly traded notional has been fluctuating since 2011. It peaked at USD 43.7 billion in the first quarter of 2016 and dropped to USD 11.3 billion in the fourth quarter of 2017.

27 ITraxx Asia data includes mostly iTRAXX Asia Ex Japan CDS Investment Grade Index trades and some insignificant amount of iTraxx Asia Ex Japan CDS High Yield Index trades.

Chart 8: iTraxx Asia traded notional



Source: ISDA analysis based on TIW data

Annex II: Accessing the onshore Chinese bond markets

Qualified Foreign Institutional Investor (QFII)

In 2002, the China Securities Regulatory Commission (CSRC) and the People's Bank of China (PBoC) jointly issued the Provisional Measures on Administration of Domestic Securities Investment of Qualified Foreign Institutional Investors, initiating the pilot QFII scheme, allowing foreign investors to enter China's capital market directly. Qualified Foreign Institutional Investors (QFIIs), include asset management companies, insurance companies, securities firms, commercial banks, and others such as pension funds, charity foundations, endowment funds, and sovereign wealth funds. In 2013 the QFII Rules were revised to diversify the types of institutions from those in the pilot scheme and to relax restrictions on the scope of investments.

QFIIs also need to register with the State Administration for Foreign Exchange (SAFE) and are subject to an investment quota (in USD) based on the investor's total assets under management. After bringing their USD onshore, QFIIs can convert this to CNY and trade in exchange traded products (such as equities and bonds), or invest in the interbank bond market (after registering with the PBoC).

In 2011, the Renminbi Qualified Institutional Investor (RQFII) scheme was initiated. This allows the use of offshore CNY funds (CNH) raised in Hong Kong by the subsidiaries of domestic fund management companies and securities companies in Hong Kong to invest in the domestic securities market. Similar to the QFII scheme, investors apply for approval from the CSRC and register with SAFE. RQFIIs are also subject to a quota, but based on CNY.

China Interbank Bond Market (CIBM) scheme

In 2016, the China Interbank Bond Market scheme was introduced, allowing international investors access to the Chinese bond market (both government and corporate bonds). Similar to the QFII scheme, it provides access for a range of investors (commercial banks, asset managers, insurers, securities houses, pension funds, charitable funds, and other long-term investors), and provides for three categories of investors:

- Type A can trade, settle and provide custody for interbank bond market instruments both for themselves and on behalf of Type C investors
- Type B can trade and settle in the interbank bond market for themselves, and trade directly with others
- Type C must appoint a Type A investor for settlement to carry out bond trading on their behalf. As of December 2017, all foreign investors are Type C

Investors are required to register with the PBoC and must appoint an onshore settlement agent. The settlement agent opens a clearing account on behalf of the investor. There are two main clearing houses: the Shanghai Clearing House (SCH), which is used to settle medium-term notes (MTNs) and commercial paper (CP), and the China Central Depository and Clearing company (CCDC), which is used to settle government bonds and policy bank bonds. The settlement agent will also open an account with the China Foreign Exchange Trading System (CFETS). In case an investor enters the CIBM with one single currency, the first repatriation amount cannot exceed 110%. However, there is no limit starting from the second repatriation. Offshore investors must invest within a 9-month period at least 50% of the investment amount that they mentioned in their PBoC registration filing form. The CIBM also provides access to new instruments available for hedging purpose (i.e. bond lending, bond forwards, and forward rate agreements), subject to completing legal documentation.

Bond Connect

In July 2017, the PBoC and the Hong Kong Monetary Authority (HKMA) jointly announced the launch of the Bond Connect program. Similar to the Stock Connect program (launched in 2014), Bond Connect facilitates access via the Hong Kong Stock Exchange for international investors to China's domestic bond market, and Chinese investors' access to the international bond markets.

Unlike the CIBM scheme, Bond Connect does not require the appointment of an onshore settlement agent. The direct settlement counterparty for offshore investors is the HKMA's Central Moneymarkets Unit (CMU), which settles trades through accounts opened with SCH and CCDC. International investors are able to submit electronic request for quotes (RFQs) with one or more onshore participating dealers, and are able to invest in all fixed income securities tradable on the CIBM, including treasury bonds, local government bonds, central bank papers, financial bonds, corporate credit bonds, CP, and asset-backed securities.

It is important to note that the different access routes are not fungible. In other words, an investor purchasing bonds via the QFII, RQFII, CIBM, or Bond Connect schemes will also be required to use the same scheme when subsequently selling those bonds.

Annex III: APAC countries of issuer risk included in this report

Abbreviation	Country
AS	American Samoa
AU	Australia
CN	China
HK	Hong Kong
ID	Indonesia
IN	India
JP	Japan
KR	Republic of Korea
KZ	Kazakhstan
LK	Sri Lanka
MN	Mongolia
MO	Macau
MY	Malaysia
NZ	New Zealand
PH	Philippines
PK	Pakistan
SG	Singapore
TH	Thailand
TW	Taiwan
VN	Vietnam

ICMA

International
Capital
Market
Association