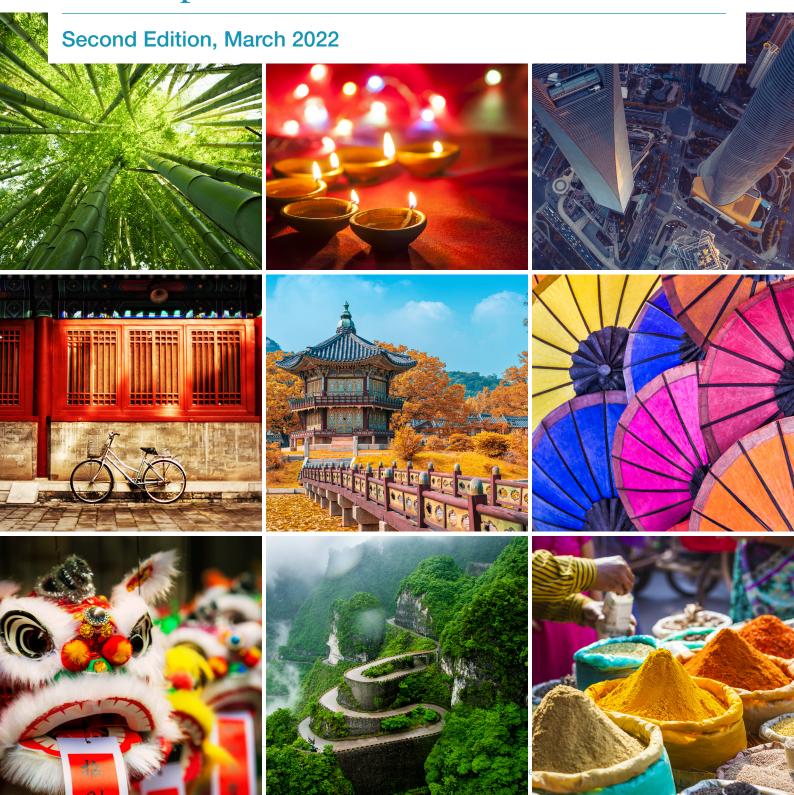


The Asian International Bond Markets: Development and Trends



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This report draws upon numerous interviews with market participants as well as discussions with the ICMA Asia-Pacific Bond Syndicate Forum and ICMA Asia-Pacific Legal and Documentation Forum. ICMA in particular would like to acknowledge AIA, Bank of China, BNP Paribas, Citi, HSBC, JP Morgan, Shanghai Clearing House, Standard Chartered Bank and State Street for their contributions to the current report, as well as those who provided insights previously for The Asian International Bond Markets: Development and Trends, 2021, The Asia-Pacific Cross-Border Corporate Bond Secondary Market, 2018, and The Internationalization of the China Corporate Bond Market, 2021. ICMA would further like to thank the sources of data used in this report: Bloomberg, Dealogic, EquiLend, IHS Markit (now part of S&P Global) and MarketAxess.



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Executive summary

Annual issuance of cross-border bonds from Asia has increased more than sixfold from USD 107 billion in 2006, reaching USD 614 billion in 2021. This report explores the evolution and remarkable growth of the international bond market in Asia over the last 16 years.

The report is organised in two sections, covering the primary and secondary markets. For the primary markets, this report examines issuances through multiple geographical lenses, by the location of arrangement and execution, the location of listing, the issuer's major place of business and the issuer entity's legal place of incorporation. China, India, ASEAN, Japan, and South Korea, the main subregions in Asia, have all witnessed an increase in issuance volume since 2006. Among them, international bond issuance from China has surged and now accounts for 37% of the international issuance volume in Asia. The growth of international bond market in Asia has been fuelled in large part by the steady entry of new issuers to the market.

An increasing and more diverse investor base as well as the established professional services provided by lead banks and listing venues have supported the expansion of the market in Asia. Over the years, Asian financial centres have played a larger role and gained market share in arrangement and listing. Overall issuance volumes remained steady from 2020 to 2021, showing the resilience of the markets as the global pandemic continued into its second year. Green, social, sustainability and sustainability-linked bonds (all together "sustainable bonds") have been gaining traction in the Asia international bond markets, with a 2.7-fold increase in the annual issuance amount from USD 37 billion in 2020 to USD 99 billion in 2021.

With respect to the secondary market, this report reviews overall market structure and assesses liquidity conditions, e-trading, and hedging and repo markets in Asia. It also provides a snapshot of recent market performance and market sentiment.

Secondary liquidity in Asia international bonds is mainly supported by market makers, which often organise their trading desks along sector lines. Quantitative data on trade volumes and counts suggest a more active secondary market in 2021 compared with previous years. Chinese issues are dominant in secondary trading, reflecting the make-up of the primary market. While China IG issuances seem to be the most liquid segment, China HY bonds experienced more volatility with less liquidity.

Across the region, platform-based trading continued to gain momentum over the past twelve months, primarily due to efficiency considerations. Trade sizes on venues tend to be smaller, while trading large size clips still relies on the more traditional approaches of phone or electronic "chat" trading.

In terms of market performance, the Asia international credit market continued to track the movement of other international USD and hard currency credit markets, with a higher degree of sensitivity in 2021.

Introduction

Why this report?

ICMA initiated this research on the fast-growing international bond market in Asia and published its first report The Asian International Bond Markets: Development and Trends in March 2021. This second edition of the report aims to provide global market stakeholders with an updated overview of development and trends following the 2021 report. It extends the coverage of the previous report to include analysis of market events through the end of 2021.

This report also supplements two previous ICMA reports:

- The Asia-Pacific Cross-Border Corporate Bond Secondary Market, 2018, which aims to analyse and document the state and evolution of the international APAC credit markets, primarily from the perspective of USD, EUR, and GBP denominated issuance; and
- The Internationalization of the China Corporate Bond Market, 2021, which focuses on China's domestic CNY and offshore (primarily USD denominated) corporate bond markets.

Scope and methodology

The focus of this report is the international bond¹ market in Asia², which is most easily accessible to international market participants. This research covers trends in primary issuance in the international bond market as well as secondary market structure and trends in recent years.

In this report, ICMA combines quantitative data analysis where available with qualitative input from selected market participants. The quantitative data is taken from a variety of sources. The qualitative input was synthesised from a series of interviews with investment banks, investors, trading venues, and market infrastructures (a list of participating institutions is provided in the acknowledgements). Interviews were conducted from October 2021 to January 2022. ICMA is grateful to the Hong Kong Monetary Authority for significant support on the quantitative data collection and analysis, as well as guidance on overall themes in this report.

About ICMA

The International Capital Market Association (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 600 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 and law firms. It provides industry-driven standards and recommendations, prioritising sustainable finance and three core fixed income market areas: primary; secondary; repo and collateral. ICMA works with regulatory and governmental authorities, helping to ensure that financial regulation supports stable and efficient capital markets. www.icmagroup.org

Throughout the report, the term "international bonds" refers to issues that are sold in a market outside the issuer's home jurisdiction, in the Euro market, or globally. This definition may be independent of whether or not a bond is cleared on ICSDs.

The definition of Asia may differ by source with respect to certain frontier markets. Please refer to the full definitions at the end of the report.

Primary Markets

International bonds globally and in Asia

For any particular jurisdiction, the international bond market usually develops after issuers become seasoned in their domestic capital markets. Domestic borrowers tend to raise money in their own domestic market first, not only because their operations are in local currency, but also because they are more familiar with investors and regulations closer to home. As issuers gain experience, they may gradually tap another country's market with issuances in that country's currency, or issue bonds internationally in a global foreign currency and have them cleared through an international clearing house ICSD. Unlike local currency bonds in the domestic market, international bonds are mostly intended for institutional investors and/or individual professional investors only.

Reasons for raising funds via international bonds include, but are not limited to, meeting foreign currency funding needs, managing funding costs and structure, diversifying funding channels and investor base, and raising profile in the international markets. For investors, international bond markets serve as a channel to obtain exposure to emerging market credits without the need to establish access to individual domestic markets or manage foreign exchange risks associated with local currencies. Investing in international bonds may also help with portfolio diversification and yield seeking, especially in emerging markets such as Asia.

With capital markets becoming more mature domestically, more international bond issuances have come to the market. Domestic issuers are becoming more seasoned and seek to diversify their funding channels, while investor interest in emerging market credit has also increased.

The Asian international bond market has experienced significant growth over recent years (figure 1), with issuance amounting to another record level of USD 614 billion in 2021³. However, international bond issuances still make up nearly 20% of all bond issuances from the region, compared with approximately 40% for the world (figure 2). One main reason, as interview participants pointed out, is a preference for many Asian issuers to secure financing onshore. Detailed reasons vary from country to country and are explained more fully in the section "Deal nationality" below.

While reliable regional data is difficult to obtain, generally speaking the view of market participants is that Asian companies source a smaller proportion of their total borrowings from the bond market in comparison with the US and European markets. For example, in China, total loan financing accounts for approximately four times the amount of bond financing for non-financial corporates, while in Europe corporate loans outstanding are three times the amount of corporate bonds outstanding, and in the US market the outstanding amount of corporate bonds exceeds that of corporate loans by 15%.4 Considering the lower ratio of bond financing in Asia, the international bond market in this region has potential to grow further.

According to Dealogic data as of January 2022

ICMA estimates based on statistics published by the People's Bank of China, Euro Area Statistics, the Federal Reserve and Bank of International Settlement.

Figure 1: Global international bond issuance - by region (deal nationality⁵)

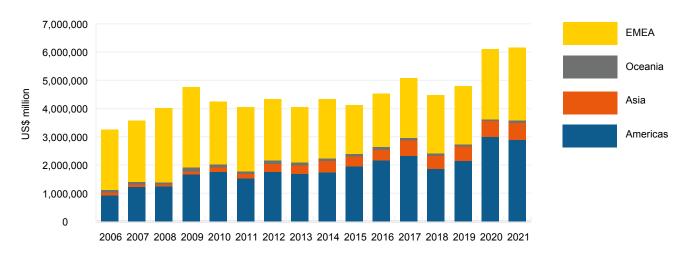
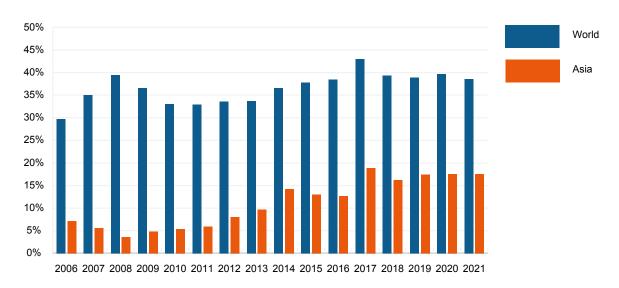


Figure 2: Percentage of international bonds issuances over all issuances



Source: ICMA analysis using Dealogic data (February 2022)

In the context of the international bond markets, participants and operations often cover multiple jurisdictions, and geographical analysis often presents methodological issues. This paper provides various ways to look at "where" a bond transaction takes place, in the spirit of providing a more complete and nuanced picture of overall regional market activity. The analysis first covers the location of arrangement and execution, secondly the location of listing, subsequently the issuer's major place of business (the "deal nationality") and finally the most straightforward (but also potentially misleading) criterion which is the issuer entity's legal place of incorporation.

⁵ Dealogic's definition of "deal nationality" is the nationality where the majority of the borrower's business takes place. Throughout this report, countries and regions refer to the deal nationality of bond issuances, unless otherwise specified.

Arrangement and execution

When issuing bonds, it is common practice for issuers to appoint market intermediaries, typically banks, to manage the debt capital raising process. The lead managers help issuers to understand market conditions and explore investor interest, and then manage book-building and allocation. Usually, these bank arrangers have an aim to cultivate and maintain investment relationships with investors that are both able to contribute to satisfying the issuer's ongoing funding needs; and also willing to act as committed ("buy and hold") stakeholders in the issuer's business. In particular, it is often important to issuers that investors in the primary market are purchasing bonds for investment purposes, rather than trading purposes, which helps to ensure that issuers will have closer relationships with and better long-term understanding of their direct investors. Therefore, the bank arrangers' ability to ensure access to a wide investor base, optimally price the transaction, and fulfil the issuers' funding requirements are essential contributors to the success of the bond issuance.

For purposes of this analysis, a bond is considered as arranged in the location where the majority of its arranging activities take place. Bond arranging activities comprise originating and structuring, bookbuilding, legal and transaction documentation preparation, and sale and distribution.

Where a bond is arranged in practice depends on many factors but is mainly influenced by the location of the leading banks (and their teams of professionals across investment banking, trading, legal, and operations) who are appointed to manage the transaction. A financial centre's regulatory system, independence of judiciary, and enforceability of contracts are also important for banks to minimise legal and operational risk in execution.

Looking at the main location of arrangement⁶ of Asian international issuances, the main trend since 2010 is that Asian financial centres have gained market share. The trend could be mainly attributed to the significant growth in bonds issued by Chinese issuers and Hong Kong's role as an established hub for international Chinese transactions. In particular, banks located in Hong Kong are seen to have closer banking relationships to the Chinese mainland combined with experience in international issuance practice and the ability to distribute bonds to a global investor base.

Over the last decade, Hong Kong has overtaken non-Asian financial centres to become the most common location for Asian international bonds to be arranged. Before 2010 mandates in the region were mostly granted to UK-based and US-based banks. Since 2010, banks located in Asia, especially Hong Kong, have managed an increasing share of international bond issuance from Asian jurisdictions. For 2021, Hong Kong arranged 34% of the Asian transactions⁷, while the US and the UK took shares of 22% and 17%, and Singapore 5%. The market shares in 2021 are similar to those in 2020.

The main location of arrangement is the jurisdiction which more than 50% of the lead banks of a deal comes from. If two jurisdictions tie for a deal, the averaged nominal amount of the bond is calculated. Deals that do not have dominant jurisdiction for the group of lead banks are classified to "consortium".

By nominal amount of bond issuance.

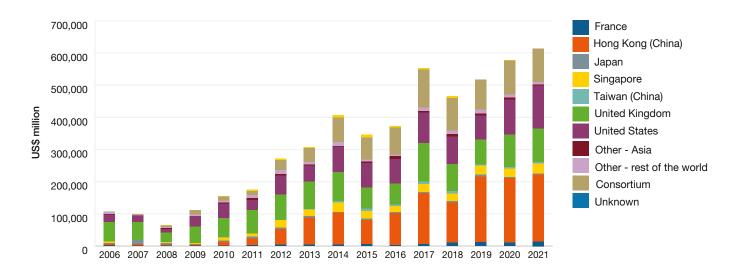


Figure 3: International bond issuance in Asia (deal nationality) - by main location of arrangement

One of the distinct characteristics of the Asia bond markets is that some bookrunners are also investors in those bonds being arranged. The extent to which proprietary and arm's-length orders by bookrunners are included in the book and disclosed to investors may affect the price discovery process and overall demand for new issues. In 2018 and 2020 respectively, the International Organization of Securities Commissions (IOSCO) proposed regulatory measures to improve governance of ECM and DCM activities and address issues that may arise from conflict of interests, such as proprietary orders of bookrunners.

In line with the themes of the IOSCO recommendations, the Hong Kong Securities and Futures Commission (SFC) released in November 2021 a new Code of Conduct for capital market transactions in Hong Kong. The proposed requirements are aimed at clarifying the roles played by intermediaries in DCM and ECM transactions and set out the standards of conduct expected of them in bookbuilding, pricing, allocation and placing activities. The new Code, effective August 2022, will at the minimum apply to all bond issuances managed from Hong Kong. The reforms will likely cover a large proportion of cross-border G3 Asian deals and almost all international bonds from Chinese issuers.

The new Code is applicable to all licensed intermediaries conducting bookbuilding and placing in Hong Kong. The new standards of conduct will cover, among other aspects of the issuance process, the appointment of syndicates, communications between syndicates and issuers, treatment of proprietary orders from underwriter banks and related entities, transparency with respect to investor identities and investor demand, rebates offered to investors, and management of conflicts of interest.

Over the past few years, ICMA has been working with its primary market committees on voluntary best market practices regarding proprietary orders and book disclosure to encourage fairness and efficiency in the debt capital markets. In light of the new conduct requirements for transactions executed from Hong Kong, ICMA will remain active over the implementation phase with its members to establish common practices on procedures and documentation to comply with the Code, as well as educate market stakeholders on the potential implications.

Listing

The listing of a bond on an exchange in theory facilitates trading on the secondary market, just as with equities. However, in practice, the Asian international bond market is similar to the rest of the world in that bonds are listed at exchange but are generally traded OTC. While market perspectives vary on the ultimate rationale for bonds in Asian international bonds to be listed, one reason cited is that listed securities are preferred by many international institutional investors.

The ultimate motivations for this investor preference vary (and not all international investors require or prefer securities to be listed), but some general reasons are potentially increased transparency on deal documentation, required ongoing disclosure, an extra layer of governance provided by the listing approval process, and a potential, if not always realised, liquidity increase from on-exchange trading. Among the institutional investors in the bond markets, some fund managers have a requirement in their fund mandates of investing in listed securities. Also, some investors may be able to invest in international bonds in practice only if they are listed on the exchanges of the investors' home countries. (For example, until late 2018 Taiwan life insurers could invest in international bonds listed at the Taipei Exchange which did not take up their overseas investment limit.) Bond issuances targeted at European markets may choose to be listed at both the London Stock Exchange and an exchange in the European Economic Area. Therefore, by obtaining dual listing status for their bonds, issuers may pave the way for outreach to a potentially wider group of investors.

In fact, 14% of international bond issuances in 2021 were listed on more than one exchange. The issuer's choice of listing location is generally determined by the relative simplicity, speed, and affordability of the listing process. In the last decade, around 81% of international bonds issued by Asian issuers were listed (figure 4).

100%
90%
80%
70%
60%
40%
30%
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021

Figure 4: International bond issuances in Asia (deal nationality) - listed or not

Source: ICMA analysis using Dealogic data (January 2022)

As interview participants suggest, besides considering who the target investors are, and any regulation or requirement they may face, when choosing the listing venue/country, issuers' main criteria are efficiency and cost of listing application and approval. For Asian international issuances, Singapore and Hong Kong are the most popular places for listing in Asia, and Luxembourg and the UK are the most popular in Europe. In 2021, Singapore and Hong Kong hosted 35% and 25% of the international issuances from Asia respectively, while Luxembourg and the UK listed 12% and 5% of them (figure 5). This echoes the common view of issuers and underwriters that a streamlined listing procedure for bonds facilitates the financial centres to attract more bond listing.

700,000 Hong Kong (China) Luxembourg 600,000 Singapore United Kingdom 500,000 Other - Asia JS\$ million Other - rest of the world 400,000 Unknown Unlisted 300,000 200,000 100,000 0 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021

Figure 5: International bond issuance in Asia (deal nationality) - by listing location

Deal nationality

International bond issuances from Asia amounted to USD 614 billion in 2021, compared with USD 577 billion in 2020. Before 2010, Japan and South Korea were the most active issuer countries, with relatively small international issuance from each country in the rest of Asia. Since 2010 there has been a significant increase in issuance volume from China (including Hong Kong), ASEAN and India.

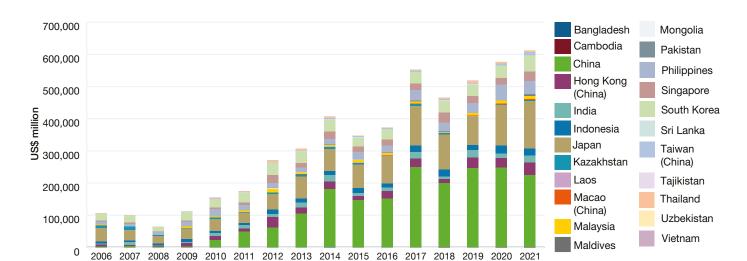


Figure 6: International bond issuance in Asia - by deal nationality

Source: ICMA analysis using Dealogic data (January 2022)

China9

The amount of international bond issuances from China increased rapidly since 2010 (figure 7), from fewer than 20 deals each year in the 2000s to over 700 deals in 2021.

300,000 250,000 150,000 100,000 50,000 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021

Figure 7: International bond issuances from China (deal nationality)

Source: ICMA analysis using Dealogic data (January 2022)

One of the factors contributing to this significant growth is the increasing overseas operational and financial activities of Chinese entities. Raising funds in USD or Euro offshore to meet their acquisition or expansion plans was especially advantageous from 2010 to 2014 with continued appreciation of RMB and low interest rates in USD funding markets. Interest rate hikes introduced by the Fed and the devaluation of RMB in 2015-2016, as well as the filing requirement introduced in 2015¹⁰ for all offshore issuances longer than one-year, led to a temporary decline in fund raising activities of Chinese entities offshore. The upward trend in issuance resumed in 2016. In 2018, the National Development and Reform Commission introduced stricter standards to manage the scale of foreign debt financings by onshore enterprises. These new stipulations, aimed at reducing levels of corporate and institutional leverage, contributed to the decline of new issuances from China in 2018.

For some Chinese issuers, going into the offshore market is a means to diversify their financing structure by providing an additional funding channel. The international bonds do not replace but rather supplement their existing bank loan or onshore capital raising. It issuers compare the cost of offshore funding after hedging with the market yield onshore, as well as considering where the funds raised will be used. Some interviewees pointed out that the offshore market allowed cheaper funding for IG issuers after hedging in 2020, but the case was reversed in 2021. As a result, more high-rated issuers turned to onshore issuances, contributing to the decline in the international bond issuance volume by Chinese issuers.

The flexibility of use of funds is a reason to favour an international bond issuance. Compared with issuers elsewhere in Asia, Chinese issuers also tend to attribute a greater weight to the opportunity to build a global reputation in addition to the obvious concerns of cost of capital when deciding whether to tap the international bond market. Some local governments encourage local state-owned enterprises (SOEs) and local government financing vehicles (LGFVs) to enter the offshore market, in order to promote their provinces and attract foreign investment in the long run.

^{9 &}quot;China" by jurisdiction.

¹⁰ China's National Development and Reform Commission (NDRC) Circular on Promoting the Reform of the Filing and Registration Regime for Issuance of Foreign Debt by Corporate Entities (Circular 2044) published in September 2015.

¹¹ It is notable, however, that bond financing is playing a larger role for Chinese corporates. The ratio of the outstanding volume of bonds to loans of non-financial corporates in the domestic market has increased from 16% at the beginning of 2014 to 26% at the end of 2021. (numbers estimated by ICMA based on statistics of PBOC)

In 2021, significant credit events from the Chinese real estate industry affected issuance from the overall sector into the international bond market. Issuance volume from this class of issuer has continued to decline since June 2021 (figure 8) and the bond prices of many real estate issuers declined to distressed levels.

Nonetheless, the overall issuance volumes for both high-yield and investment grade bonds from onshore companies has remained generally consistent from 2020 to 2021. Also, despite concerns about the property sector (which accounts for a significant proportion of high-yield issuance), the proportion of overall high-yield and investment grade issuance has not changed dramatically from 2020 to 2021. (figure 9)

20,000 - 2020 18,000 2021 16,000 14,000 JS\$ million 12,000 10,000 8,000 6,000 4,000 2,000 0 Feb Dec Jan Mar Apr May Jun Sep Oct Nov

Figure 8: International bond issuances from Chinese real estate issuers

Source: ICMA analysis using Dealogic data (January 2022)

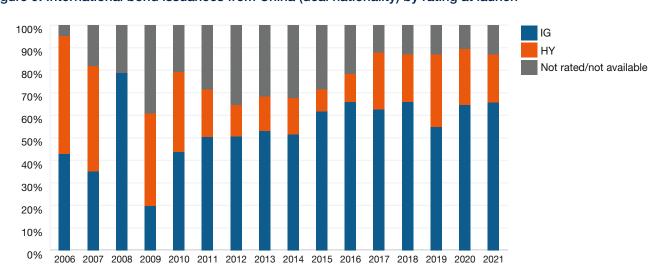


Figure 9: International bond issuances from China (deal nationality) by rating at launch

Source: ICMA analysis using Dealogic data (January 2022)

The overall supply from Chinese issuers was still quite heavy for 2021, amounting to US\$ 224 billion and taking up 37% of all the international bond issuances from Asia. Financial institutions and real estate have been the main suppliers, but the suite of Chinese issuers continued to diversify by sector since 2018 (figure 10). For example, the TMT (Technology, Media and Telecommunications) and industrials sectors have been more active in the primary markets. Issuers of weaker credits were still able to access the market but may need to provide additional credit enhancements. Dealogic data from 2021 shows a record number of offshore Chinese bonds with standby letter of credits (SBLC), probably partly due to the property sector implications on the HY markets, and partly due to the concerns about the enforceability of "keepwell agreements" intended to provide additional credit support. While 24 new issuances in 2020 were supported by SBLC, this number increased to 80 issuances in 2021.

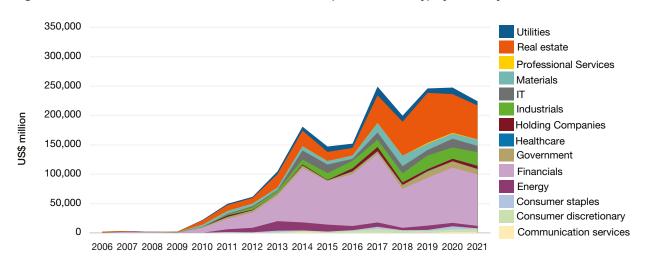


Figure 10: International bond issuances from China (deal nationality) by industry

Source: ICMA analysis using Dealogic data (January 2022)

As of the end of 2021, compared to the previous year, many investors have expressed more caution with respect to Chinese high-yield credits, even Chinese credits in general.

On the other hand, many investors take a constructive view on recent credit events in the China market. They view this as an opportunity to accumulate recovery statistics for future analysis, gain familiarity with the restructuring process and distressed debt, and for the market to become better educated about credit differentiation.

Some market participants expressed the view that with SOEs stepping up in the restructuring process of distressed real estate developers, investors might come back in the long term, while bonds issued by financial institutions and certain types of SOEs may be preferable in the shorter term.

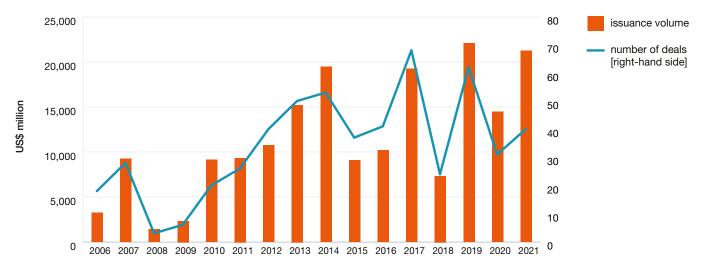
India

Back in 2006, only banks and a limited number of major corporate issuers from India tapped the foreign currency bond market. In 2011, state-owned enterprises and quasi-government entities started to consider raising funds in G3 currencies and were well received by investors, with 10 times oversubscription being observed. The shadow banking and credit crisis in 2018 led to a reduction in volumes, but issuance levels recovered the following year. International bonds from Indian issuers have continued to diversify in terms of issuer types, industry sectors (figure 12) and structures.

The international bond issuance volume by Indian issuers increased to US\$ 21 billion in 2021, very close to the record level of 2019 (figure 11). There are multiple reasons for the bullish market. Some issuers tapped the international bond market to diversity their investor base, as the amount they can borrow in the domestic market and from banks has peaked. The offshore low interest rate environment is also favourable. Concerns about Chinese high-yield issuers and

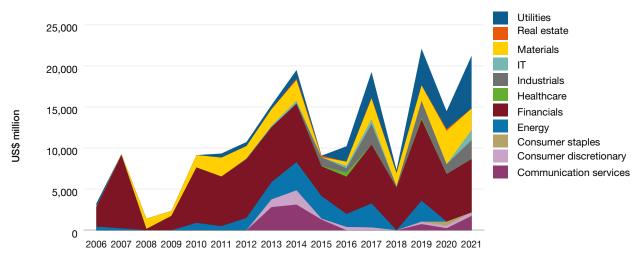
global political risks have also led some investors to diversify their portfolio from Chinese offshore bonds, and to consider Indian credits. It is also noteworthy that the average issue size reached its highest historical level in 2021 (US\$ 531 million). Also pertinent is the fact that the sustainable bonds (green, social, sustainability and sustainability-linked bonds) accounted for 44% of all the international bond issuance from India in 2021.

Figure 11: International bond issuances from India (deal nationality)



Source: ICMA analysis using Dealogic data (January 2022)

Figure 12: International bond issuances from India (deal nationality) - by industry



Source: ICMA analysis using Dealogic data (January 2022)

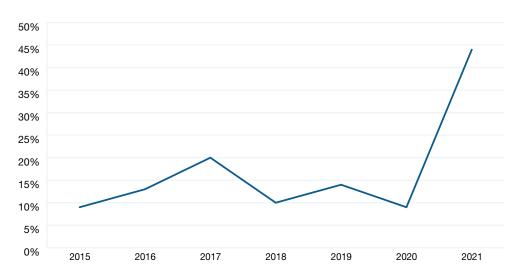


Figure 13: Percentage of sustainable bond issuance over all international issuance from India

ASEAN

In ASEAN (a subregion of 10 countries in southeast Asia), international bond issuances have grown significantly since the global financial crisis, and the total level of issuance has fluctuated over the past decade (figure 14). However, according to bankers interviewed, ASEAN corporate issuers still generally prefer domestic borrowing (in loans or bonds) over international bond issuance as their first choice.

The main reason is that the local currency bond markets have matured to become deeper and more liquid. Since the Asian financial crisis, ASEAN governments had been committed to developing robust and strong local currency bond markets with SSA12 issuances. Over time, this momentum has extended to financial institutions and corporates. In the domestic capital market, corporates enjoy the benefit of an increasingly straightforward and familiar issuance process, adequate demand in relation to issue size, and familiarity with investors. Also, borrowers may issue retail bonds to address demand from public investors too, whereas retail bonds are generally impractical in the USD international bond market due to regulatory requirements on disclosure and marketing.

In addition, commercial banks in the domestic market are relatively well capitalised which, in the experience of market participants, has meant that bank loans have historically been a less expensive source of funding than bonds¹³.

Another major factor is corporate size. Even relatively large corporates in ASEAN, when compared with global conglomerates, are relatively small. The market view, therefore, is that they may have to pay an issue premium in the international bond market.

The international bond issuance from ASEAN countries amounted to US\$ 107 billion in 2021, close to the record level of US\$ 109 billion in 2020. Breaking this down by sector, financials, followed by energy and utility firms, are the major issuers with market share of 55% and 9% respectively, while sovereign issuers are also users of the international bond markets, accounting for 18% of primary international issuance. Sustainable finance is growing in the region, which is seen by the market as an opportunity for the issuer base to diversify in order to meet the demand for sustainable bonds from global investors. The official sector is making progress to encourage industry transition in addressing the global challenge of climate change. In particular, the first version of the ASEAN Taxonomy was released in November 2021 and will help provide clear definition for green and transition, encouraging the energy and utility issuers to transition, while assisting international investors to better assess their sustainability efforts.

¹² SSA: Sovereign, supranational and agency.

¹³ This is based on qualitative input by interview participants and holds true for individual borrowers. It is however difficult to compare cost of bond and loan financing on an aggregate basis.

120,000 Cambodia Indonesia 100,000 Laos Malaysia Philippines 80,000 US\$ million Singapore Thailand 60,000 Vietnam 40,000 20,000 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021

Figure 14: International bond issuance from ASEAN (deal nationality)

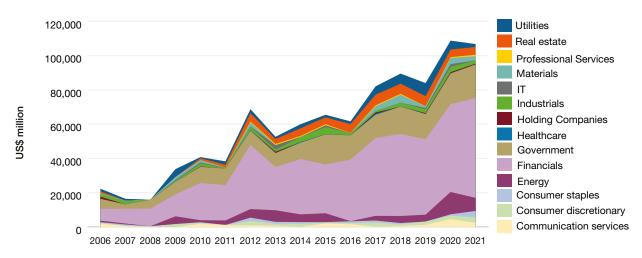


Figure 15: International bond issuance from ASEAN (deal nationality) - by industry

Source: ICMA analysis using Dealogic data (January 2022)

Japan

Japan has a well-developed international bond market with a long history. Japan's first government bond, issued in 1870 to fund railway construction, was issued in London and denominated in GBP. Subsequently, the Japanese government established financial and securities regulations to develop its domestic market.

Currently there are well established markets for JPY denominated bonds issued offshore (known as Euroyen bonds, since 1984), JPY denominated bonds issued in Japan by offshore issuers (known as Samurai bonds, since 1970), and for foreign currency denominated bonds issued in Japan by offshore issuers (known as Shogun bonds).

The factors affecting the international bond issuances, including the comparative advantage in funding cost and JPY against other hard currencies, are increasingly influenced by monetary policies of Japan's and other major central banks. The Bank of Japan introduced its quantitative easing (QE) program in 2001, which has established an ultra-low interest rate environment for the Japanese bond market for the last two decades.

In the international market, the interest rate environment initially contributed to the development the Yen carry trade (borrowing Yen at lower cost to invest in other currency-denominated assets), which also led to an increase in yen denominated bond issuances. However, following the global financial crisis and the subsequent dramatic decrease in USD rates, the market gradually shifted away from the carry trade, and to a larger extent began to reflect credit fundamentals, more genuine funding needs, and business relationships between Japan and international investors.

Since the 2008 financial crisis, the issuance volume of Japanese offshore bonds has grown steadily. In 2017 it reached a peak of over USD 120 billion, driven by the desire of Japanese issuers to diversify their funding channels as well as to fund the operations of international businesses. The last two years have also been record years for international bond issuance from Japan, with US\$127 billion in 2020 and US\$ 149 billion in 2021. Financial institutions are the dominant type of issuers, accounting for over three quarters of the total international issuance from Japan in 2021.

Utilities 160,000 Real estate 140,000 Professional Services Materials 120,000 Industrials 100,000 JS\$ million **Holding Companies** 80,000 Healthcare Government 60.000 Financials Consumer staples 40,000 Consumer discretionary 20,000 Communication services 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021

Figure 16: International bond issuance from Japan (deal nationality) - by industry

Source: ICMA analysis using Dealogic data (January 2022)

South Korea

International bonds from South Korea are also seen as attractive for institutional investors, both in their own right and as a diversification from Chinese credits. The issuances from Korea are dominated by bank issuers and SOEs, which are considered to have solid fundamentals and relatively low credit risk. Some are issued at a narrow spread to treasuries, but some types of investors, such as central banks, are happy to buy and hold, considering these a safe investment.

Utilities 60,000 Real estate Materials 50,000 Industrials 40,000 **Holding Companies** US\$ million Healthcare 30,000 Government Financials 20,000 Energy Consumer staples Consumer discretionary 10,000 Communication services 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021

Figure 17: International bond issuance from South Korea (deal nationality) - by industry

Issuer incorporation

When counting Asian international bonds by issuer's country of incorporation (as opposed to deal nationality, which is based on the economic activities of the issuer and generally more relevant to investors), the overall bond issuance is smaller in size, at US\$ 390 billion for 2021, an increase of 10% from US\$ 355 billion in 2020 (comparing figures 6 and 18). The smaller total for country of incorporation is largely due to the use of issuance vehicles established in offshore jurisdictions (such as Cayman Islands or British Virgin Islands) for Asian corporates with international operations. Under this classification of issuer incorporation, Hong Kong and Singapore have more international bond issuances than by deal nationality. To a certain extent this reflects their prominent status as international financial centres in Asia, as well as the legal frameworks in these jurisdictions to support both issuance and efficient corporate actions.



Figure 18: International bond issuance in Asia - by issuer incorporation

Source: ICMA analysis using Dealogic data (January 2022)

Debut issuance

The growth of the international bond market in Asia has been organic and fuelled constantly by new issuers¹⁴ coming to the market. From 2006 to 2021, debut international issuances generally accounted for between 4% to 12% of all issuances in a year, with exceptions of retreats during the 2008 finance crisis (1% and 3% for 2008 and 2009).

50,000 14% Debut 45,000 % of debut 12% issuance [RHS] 40,000 10% 35,000 JS\$ millior 30,000 8% 25,000 6% 20,000 15,000 4% 10,000 2% 5,000 0 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021

Figure 19: Debut issuance vs all international issuance in Asia (deal nationality)

Source: ICMA analysis using Dealogic data (January 2022)

Breaking down the debut issuances by their deal nationality, we can see Chinese deals as a significant driving force, making up 70% of all debut international issuances since 2011.

Debut international bonds from India constitute a significant component of total issuance for 2021. The volume from debut Indian issuers more than tripled in 2021 to US\$ 3.7 billion, breaking the record of US\$ 3.6 billion for 2013. The year 2021 also witnessed the first new issuer from Pakistan in the international bond market since 2006.

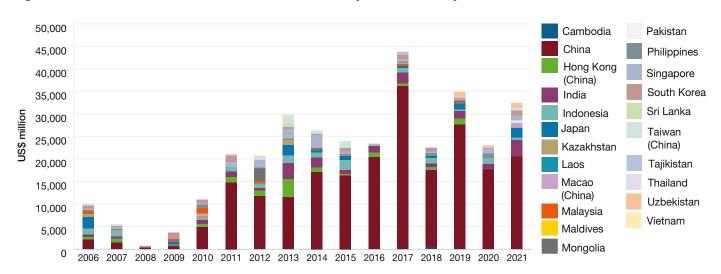


Figure 20: Debut international bond issuance in Asia - by deal nationality

Source: ICMA analysis using Dealogic data (January 2022)

¹⁴ Debut issuance in this report is defined as the first international bond issuance of a parent group

In the early growth stages of the Chinese international bond market, issuers preferred to issue their debut issuances via their companies incorporated in offshore jurisdictions (Cayman Islands, BVI, Bermuda, Jersey). The preference shifted towards Hong Kong entities in the 2010s and later to onshore entities directly (figure 21). This shift is also reflected in the trend of increasing issuances by Hong Kong entities in the first half of 2010s decade and by Chinese entities in the second half (figure 22).

Debut issuances from China rose in 2021 to US\$ 21 billion from 2020, especially accelerated in December 2021 with US\$ 3.2 billion. Partly because the keepwell structure has lost favour among international investors, 39% of the debut issuances from China in 2021 have a SBLC in place for credit enhancement.

100%
90%
80%
70%
60%
50%
40%
30%
2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021

Figure 21: Debut international issuances from China - issuer incorporation breakdown

Source: ICMA analysis using Dealogic data (January 2022)

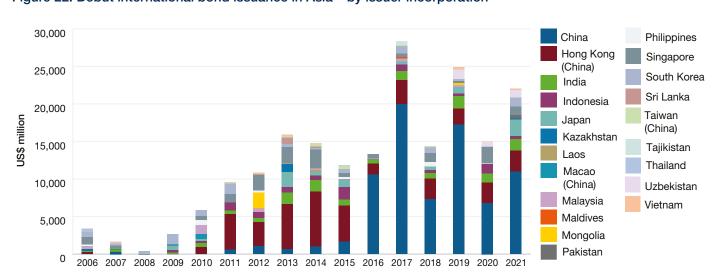


Figure 22: Debut international bond issuance in Asia – by issuer incorporation

Source: ICMA analysis using Dealogic data (January 2022)

Banks in Hong Kong are increasing market share through mandates for arranging debut issuances for Chinese corporates. In the past 5 years, Hong Kong arranged 71% of debut international issuances from Asia.

50,000 Hong Kong (China) Singapore 45,000 United Kingdom 40,000 United States 35,000 Other - Asia US\$ million 30,000 Other - rest of the world Consortium 25,000 Unknown 20,000 15,000 10,000 5,000 0 2006 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020

Figure 23: Debut international bond issuance in Asia (deal nationality) - by main location of arrangement

First-time issuers tend to have their international issuances listed, to enable maximum reach to the widest group of potential investors and make a positive impression in the international market. Less than 3% of debut issuances have not been listed since 2017. The preferred listing venues are Hong Kong Stock Exchange followed by Singapore Exchange. Listing venues in Europe are less often considered for first-time bond issuance. Over the past decade, 54% of debut issuances were listed in Hong Kong, 31% in Singapore, and 3% and 0.7% respectively in UK and Luxembourg. In 2021, 50% of debut Asian international bond issuances were listed in Hong Kong and 29% in Singapore.

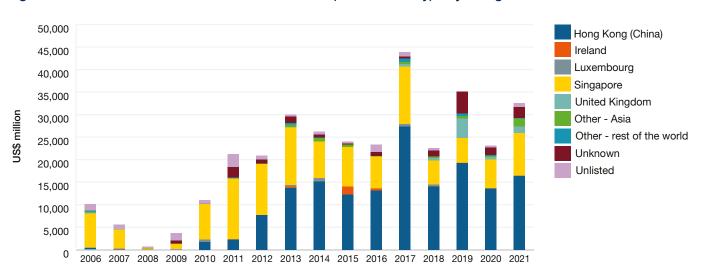


Figure 24: Debut international bond issuance in Asia (deal nationality) - by listing location

Source: ICMA analysis using Dealogic data (January 2022)

Green, social, sustainability, and sustainability-linked bonds

Green, social and sustainability, and sustainability-linked bonds (collectively "sustainable bonds") are increasingly part of the Asia international bond market landscape and have experienced exponential growth in recent years. Since the inception of the Green Bond Principles in 2014, the suite of sustainable bonds has expanded from green bonds, to social bonds, sustainability bonds, and sustainability-linked bonds (whose proceeds can be used for general corporate purposes with a pre-defined sustainability target for the issuers to reach). ICMA has managed the global bond market's voluntary best practices for sustainable bond products and published the Green Bond Principles, the Social Bond

Principles, the Sustainability Bond Guidelines, the Sustainability-Linked Bond Principles, the Climate Transition Finance Handbook, and related guidance documents.

Global market adoption, not only by issuers and investors, but also with the support of underwriters and external reviewers, as well as incentives from regulators, has fuelled the annual issuance volume of sustainable bonds from US\$38 billion in 2014 to over US\$ 1 trillion globally in 2021¹⁵.

A similar momentum is also observed in the international bond markets in Asia. Uptake of issuance notable accelerated in 2021, when the issuance volume more than doubled in 2021 to US\$ 99 billion (figure 25). Issuances from China account for 39% of total international sustainable bond issuance from Asia, followed by South Korea (21%), and Japan (12%).

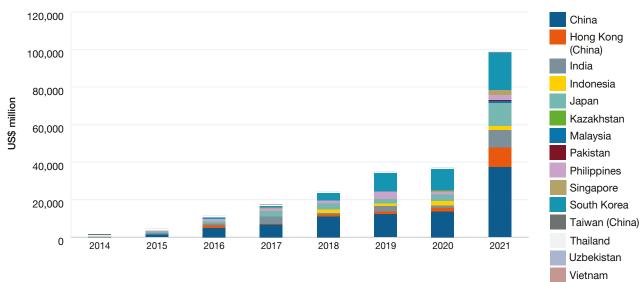


Figure 25: International sustainable bond issuance in Asia - by deal nationality

Source: ICMA analysis using Dealogic data (January 2022)

However, despite this growth, when compared with conventional bonds, sustainable bond issuances remain only a fraction of the overall bond market, making up around 11% of the annual issuance in 2021¹⁶. In the Asian international bond markets, sustainable issuances accounted for 16% of the total issuance volume in 2021. Notably Vietnam, India, South Korea, Hong Kong and China have a much higher proportion of sustainable issuances in their international bond issuances (table 1).

Interviewees note that the primary considerations for issuers on whether to issue sustainable bonds in their domestic market or offshore are how funding costs differentiate between on- and offshore, where the use of proceeds are supposed to flow, and whether the issuers target domestic investors or aim to diversify their investor base and for profiling in the long term. However, some interviewees note that large international investors are indifferent as to where the bonds are issued, as they have also established channels to invest in multiple domestic markets.

¹⁵ Environmental Finance data.

¹⁶ ICMA analysis based on Environmental Finance and S&P data.

Table 1: Higher percentage of sustainable issuance in international bonds in selected Asian jurisdictions (deal nationality)

Jurisdiction	International sustainable issuance over all international issuance in 2021
Vietnam	57%
India	44%
South Korea	39%
Hong Kong (China)	26%
China	17%
Asia average	16%
Global average	Sustainable issuance over all bond issuance in 2021
	11%

Source: ICMA analysis using Dealogic, Environmental Finance and S&P data (January 2022)

Awareness of sustainable bonds has increased steadily. Sustainable bond issuers often have sustainability on their overall corporate agenda, with management support to execute such issuances to support their underlying projects or overall sustainability strategy. Considerations include cost of funding, corporate profiling, and investor diversification across countries and regions. Interviewees expect that issuers will continue the focus on more sustainable issuances in the future.

ESG is also recognised by the international investor community as an established direction of travel. They embrace more use-of-proceeds bonds and are attracted to the structures of sustainability-linked bonds, which provide an opportunity to engage with issuers' commitment to certain goals. (For more analysis please see section "Investors and distribution".)

International sustainable bonds issued from Asia are arranged by a diverse mix of lead banks. Driven by increasing offshore issuance by Chinese issuers, banks in Hong Kong have gained market share in recent years. Around a third of the issuances were arranged by Hong Kong banks in 2021, another third by a mix of banks underwriting the bonds together, while the remainder are arranged by banks from the UK, the US, Singapore and other jurisdictions (figure 26).

120,000 France Hong Kong (China) 100,000 Singapore United Kingdom United States 80,000 US\$ million Other consortium 60,000 unknown 40,000 20,000 0 2015 2021

Figure 26: International sustainable bond issuance in Asia (deal nationality) - by main location of arrangement

Almost all (94%) of the international sustainable bond issuances in 2021 are listed. The breakdown by listing location shows a similar pattern to that for all international bonds from Asia, except that Singapore Exchange hosted a higher proportion, 46%, of the sustainable issuances. The Hong Kong Stock Exchange followed with 26%. Luxembourg and the UK are home to 7% and 6% of the issuances.

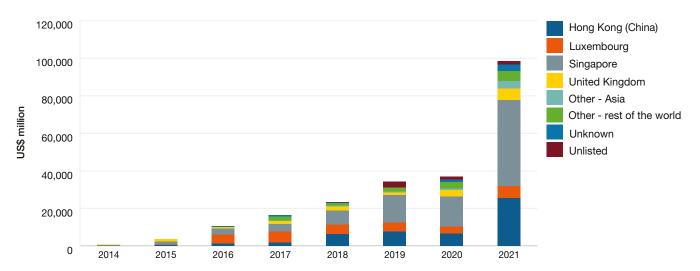


Figure 27: International sustainable bond issuance in Asia (deal nationality) - by listing location

Source: ICMA analysis using Dealogic data (January 2022)

Compared to the overall pool of international bonds from Asia, sustainable bonds have been issued infrequently at the very short end (no more than one year) and the long end (longer than 7 years) (figure 28). This may be explained by the structure of use-of-proceeds bonds, whose proceeds are invested often in long term projects, and the character of sustainability-linked bonds, where issuers are committed to an improvement in key performance indicators, with a target date in the medium term. Interviewees expressed the wish to see more primary sustainable issuances, which would help to create a benchmark curve across a wider range of tenors.

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2018

Figure 28: International sustainable bond issuance in Asia (deal nationality) - by tenor

Source ICMA analysis using Dealogic data (January 2022)

2016

2017

2015

0

2014

Sustainable bond issuance from Asia has been driven by financial sector issuers, which provided 54% of the supply since 2014. Over recent years, issuers have diversified with real estate companies and utility firms increasing market share, while some issuers from more traditional industries are exploring sustainability-linked bonds to finance their climate transition efforts. (figure 29)

2019

2020

2021

According to anecdotal observations from interviews, sustainable issuances could have a pricing benefit (i.e." greenium") of around 5-10 bps, depending on the quality of the use-of-proceeds and issuer credits.

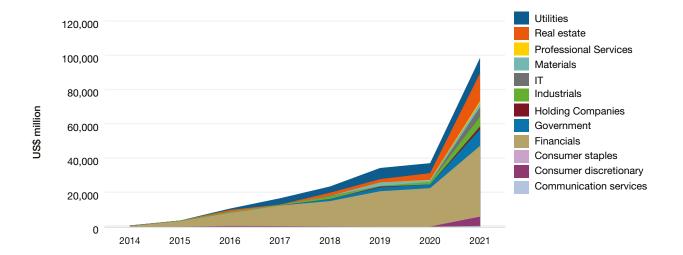


Figure 29: International sustainable bond issuance in Asia (deal nationality) - by industry

Source ICMA analysis using Dealogic data (January 2022)

Investors and distribution

As the international bond market first developed in Asia, there was an initial trend of "Asian money buying Asian bonds". Similar themes also applied for Chinese bonds. One straightforward explanation is that Asian investors – including offshore branches and subsidiaries of Asian banks and fund houses – are more familiar with Asian issuers and are more comfortable with the analysis of their credit and macroeconomic risk. In particular, it has been noted that Chinese investors may be able to better judge the risk of default on government-linked LGFVs and local SOEs. Secondly, Asian investors are generally more willing to accept the risk of (and find it easier to obtain internal approval for) Asian issuer names, rather than non-Asian issuers, given the same international credit rating. This "home country bias" is not unique to Asia and is also reflected in other regions in the world.

Interviewees indicated that this home-bias continues to influence the investor profile, but there has been increasing participation from international investors. In the early 2000s, syndicate managers would recommend an issuer to offer in US 144A format for a large bond issuance, to secure enough orders from key international institutional investors. Over the years, with more US fund managers establishing offices and raising funds in Asia, 144A distribution is no longer as necessary as before. The percentage of 144A deals has decreased since 2010 (figure 30). More recently it is not uncommon for new issuances to attract over 100 investors in the book-building process, with diverse investor backgrounds.

70% 350,000 SEC registered 144A 300,000 60% Reg S only 250,000 50% % of REG S only [RHS] JS\$ million 200.000 40% % of 144A [RHS] 150,000 30% % of SEC registered [RHS] 20% 100,000 50,000 10% 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021

Figure 30: International bond issuance in Asia (deal nationality) - SEC Registered, 144A & Reg S

Source ICMA analysis using Dealogic data (March 2022)

In general, it is difficult to derive an overall picture of the exact split of Asian and international investors for international bonds in Asia, as there is no regulatory reporting required. Also, with the growth of wealth in Asia, more US and European institutional investors have set up dedicated offices in Asia and raised funds in the region. Syndicate desks may classify orders from those Asian offices as "Asian" or international investors differently. Overall, market participants interviewed expressed a range of opinions on whether "Asian" investors in a primary distribution may represent non-Asian asset owners, or whether "non-Asian" investors in name may represent ultimate investment from Asian end-clients.

Nevertheless, interview participants generally agreed that: (i) the investor types have become more diverse; (ii) interest in Asian emerging markets from non-Asian investors has increased in terms of volume and number of investors; and (iii) that cross-border investment within Asia, has increased as a share of overall distribution.

In late September 2021, the southbound trading of Bond Connect was officially launched, to further facilitate cross-border investment. Investor participants in the southbound scheme were able to access secondary market trading from the date

of launch. According to interviews with market participants, some banks in Hong Kong have completed the necessary preparation to facilitate the participation of southbound investors in primary issuances. Some investment bankers said in the interviews that southbound investors may start to participate in primary market transactions in 2022.

With respect to ESG, institutional investors are increasingly active in sustainable finance. Many asset managers have begun to introduce sustainability-themed funds, while some investors, including insurers, have begun to report sustainability metrics, declared "net zero" targets, or introduced exclusion policies for carbon-intensive industries. Similarly, many banks also now have bank-level sustainability strategies in place to reduce the overall emissions related to their portfolios. This may in turn affect their policies toward selling and underwriting bonds both for sustainable finance and in high-carbon sectors.

Interviewees note that although institutional investors are increasingly interested in sustainable bond issuances, the primary considerations are credits, pricing, and risk-adjusted return. But many comment that if all these factors were equal, sustainable bonds would still be preferred by investors. Meanwhile, many asset managers are recruiting talents to build up their ESG teams to examine company level ESG performance among other ESG parameters in overall credit analysis. Some interviewees also state that investors of sustainable bonds tend to hold them for longer.

With the expected trend that issuers will pursue issuance of sustainable bonds, investors may have more choice over time, in terms of credit quality and tenor.

Currency

Unsurprisingly, the international bonds in Asia are mostly denominated in G3 currencies. USD issuances made up 81% of all issuances in 2021, followed by EUR (10%), SGD (2.4%), RMB (2.1%), HKD (1.5%), and GBP (1.4%).

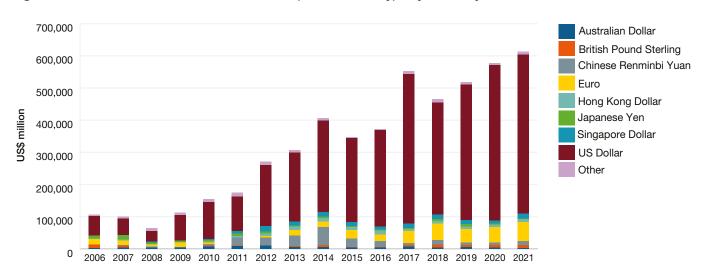
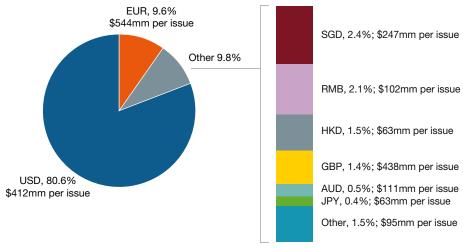


Figure 31: International bond issuance in Asia (deal nationality) - by currency

Source ICMA analysis using Dealogic data (January 2022)

Abundant liquidity in the hard currencies, namely USD, EUR, and GBP, enables issuers to tap the market with a larger issue size than issuing in local currencies, such as RMB. Issuers may not issue in the currency they need for business operations, but often consider the desired issue size and weigh up the after-swap funding cost to determine the currency for their international bond issuance.

Figure 32: 2021 issuance by currency with average issue size

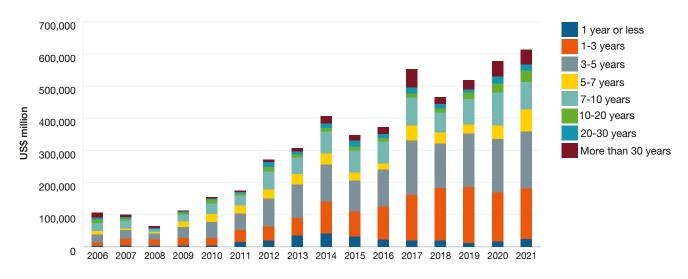


Tenor

Medium-term bonds are the most prevalent in the Asian international bond market. Tenors of 1-3 years and 3-5 years took up 26% and 29% respectively in the annual issuances in 2021. It is noteworthy that bonds with maturities no longer than one year are dominated by Chinese issuers (figure 34), partly due to filing requirements for Chinese issuers with respect to issuances of longer than one year.

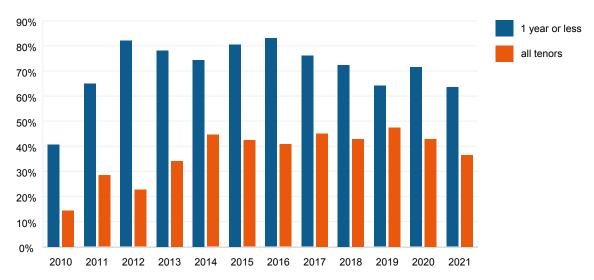
Different types of investors have their own preference for tenors. Funds often have a duration close to five years, while SSA investors and corporate treasury may prefer three years. Life insurers in contrast are often the dominant type of investors of long dated bonds, to match the long-term liabilities on their balance sheet. If there is not enough supply of long dated bonds, insurance companies look to other markets e.g. the US, Latin America and Middle East in search for such assets.

Figure 33: International bond issuance in Asia (deal nationality) - by tenor



Source: ICMA analysis using Dealogic data (January 2022)

Figure 34: Percentage of international bonds from China over Asia (deal nationality)



Secondary Markets

Overview

As with the 2021 report, this section supplements the more detailed analysis of the Asian international primary market by providing a brief perspective on the secondary market. Again, this is based on qualitative input provided through interviews with market participants and other stakeholders, as well as market data. It firstly assesses liquidity conditions, including a brief description of secondary market structure, before reviewing developments with respect to e-trading, the ancillary hedging and financing markets, as well as participant perspectives on market performance over the past twelve months.

Liquidity

The secondary market for Asia international bonds, like most international bond markets, is not exchange based, and the main sources of liquidity and pricing are provided by a network of market-makers. These are primarily the large international banks as well as domestic banks and broker-dealers. The international banks tend to make markets in bonds with a broad-range of underlying regional country-of-risk, while domestic market-makers are more inclined to focus on issuance from their own country. For G3 currencies, trading desks are usually organized along sector lines (e.g. financials, real estate, industrials), rather than country-of-risk. Some sectors tend to be more prominent with respect to underlying countries-of-risk (e.g., India tends to be predominantly banks, and Malaysia energy, while Thailand has a relatively large amount of insurance sector bonds), with the exception of China, which has a material amount of issuance across all sectors. As one interviewee explained, if you put ASEAN G3 issuance together across all sectors, it would look a lot like the China G3 market. Many interviewees described the Asia international secondary market along the same two vectors: China and ASEAN (or Asia-ex-China).

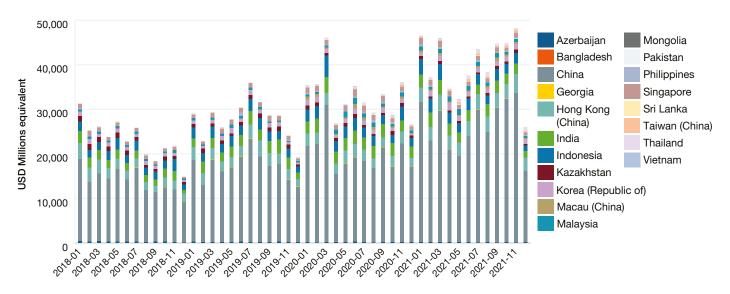
Reflective of the primary market, Chinese issues tends to dominate secondary market activity (see figures 35-38), representing some 50-60% of traded volumes, and possibly even a higher percentage in the case of financials. Participants suggest that China IG issuance tends to be the most liquid segment of the secondary market, particularly the financial sector, and especially shorter-to-intermediate maturities (the investor "sweet spot"). In these particular "Goldilocks" zones there seems to be the highest concentration of dealers, along with the most risk-based balance sheet, and finding two-way quotes is relatively easy, with trade clips of \$2-5mm being fairly standard (see figure 27 for average trade sizes). Trading block sizes of \$10-20mm is also often possible, although usually based on dealers being "axed".

China High Yield, however, appears to be much less liquid. Participants report that market-making tends to be dominated by a few international banks, and that the Chinese broker-dealers are less willing or able to commit balance sheet to secondary activity. The investor base also tends to be different from IG, with a predominance of onshore Chinese investors chasing outright yield, rather than relative value, noting that yields for offshore USD bonds and onshore CNY bonds of the same issuer can be significantly, and favourably, different (often hundreds of basis points). These are also invariably buy-to-hold. Participants report the growing interest of international distressed debt funds, particularly following credit volatility in the China real estate sector and HY more broadly. They also note that HY can be extremely volatile, and prices can gap dramatically, particularly when the few dedicated market-makers decide to step back from showing prices.

In terms of other countries of risk, participants report that Republic of Korea and Hong Kong issuance is the next most liquid, after China, followed by India, Indonesia, and Singapore.

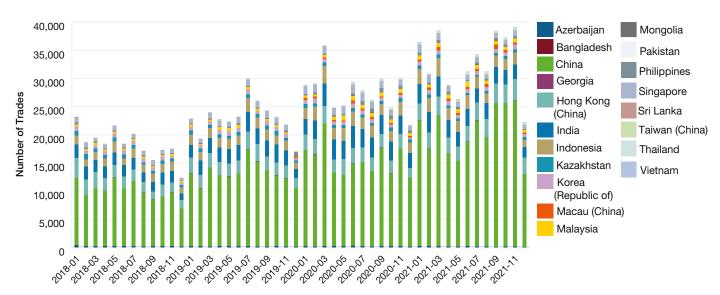
Looking at trading volumes and the number of transactions (figures 35-38), secondary market activity appears to have increased in 2021 relative to previous years. This is consistent with qualitative feedback from interviews which suggests that secondary market liquidity seems to be improving, at least in the IG space. Participants point to more balance sheet being put to work on their trading desks, particularly by the international banks.

Figure 35: Asia international credit (NFCs¹⁷) secondary market traded volumes by country of ultimate risk¹⁸



Source: ICMA analysis using Trax data from MarketAxess (January 2022)

Figure 36: Asia international credit (NFCs) secondary market trade count by country of ultimate risk

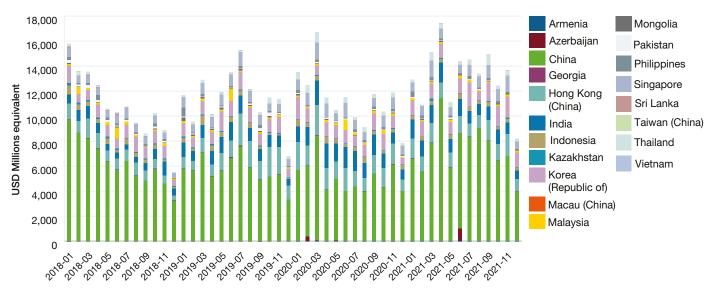


Source: ICMA analysis using Trax data from MarketAxess (January 2022)

¹⁷ Non-financial corporates (NFCs)

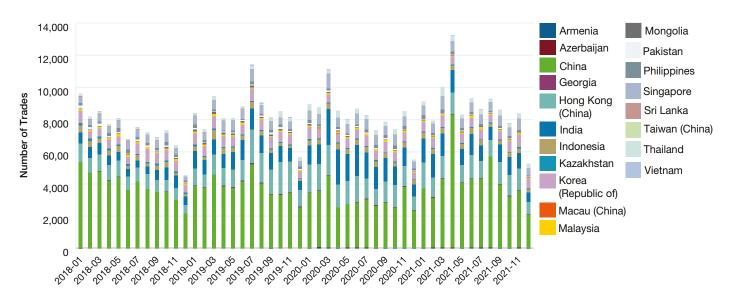
¹⁸ Trax data defines "country of ultimate risk" as the country/region where the corporate issuer or, where applicable, its parent or guarantor is domiciled.

Figure 37: Asia international credit (Financials) secondary market traded volumes by country of ultimate risk



Source: ICMA analysis using Trax data from MarketAxess (January 2022)

Figure 38: Asia international credit (Financials) secondary market trade count by country of ultimate risk



Source: ICMA analysis using Trax data from MarketAxess (January 2022)

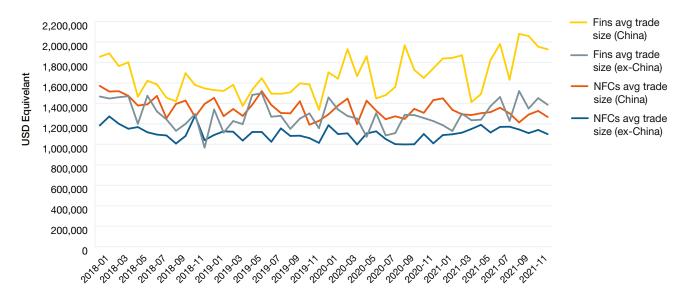


Figure 39: Asia international credit secondary market average trade size

Source: ICMA analysis using Trax data from MarketAxess (January 2022)

E-trading

Participants report an increase in the adoption of platform-based trading from 2020 to 2021, with alternative venues to the dominant incumbent gaining traction. The motivation seems to be more efficiency driven, with the benefits of straight-through-processing, rather than any additional liquidity, and dealer request-for-quote (RFQ) is the predominant protocol, consistent with the dealer-centric structure of the secondary market. Some interviewees note growing interest in "all-to-all" RFQs, which have gained momentum in the US and Europe, but one buy-side participant stated that it was still primarily market-makers on the other side of the trade.

Participants also comment that trade sizes on venues tend to be relatively smaller in volume, usually US\$1mm or less. At these trade sizes, dealers seem comfortable quoting across platforms, or may be relying on algorithm-based autoquoting. For large sized trades, particularly block trades, the process involves far more negotiation which is more likely to take place over the phone or via electronic "chat".

Despite the absence of a regional consolidated tape, interviewees expressed little concerns around transparency, which is often described as "good", and based on existing, established pre- and post-trade data sources, as well as internal, proprietary data capture.

Hedging and financing markets

Key facilitators for market-making are the ability to hedge credit risk, as well as to finance long and short positions.

As with the interviews for the previous report, participants confirm adequate liquidity in index credit default swap (CDS) markets, which provides for more generic hedging of credit risk, however single name (SN-CDS) liquidity for Asia credit remains poor, making it challenging to hedge specific credit risk. And while it is possible to find quotes in some of the more active single name credits, unwinding the position could prove more challenging. Given the continued growth in primary bond issuance and secondary market trading activity, the dearth of SN-CDS liquidity could be viewed as a critical gap in the Asia international bond market structure.

With respect to repo (including securities lending), in contrast to 2020, participants report that market liquidity, at least for IG, was relatively good in 2021. This is particularly important with respect to market-makers being able to provide offerside liquidity in bonds that they do not hold in inventory.

This would appear to be corroborated by data from DataLend which shows Asia international credit on loan (lender-to-broker), which is a good proxy for specific (i.e. short covering) repo activity (see Figure 40). On-loan balances begin to increase in early 2021, spiking in March 2021, with China and Hong Kong credit seeing a notable increase. This correlates with a widening of Asia credit spreads (see figure 43) that starts shortly after (from April/May 2021). On-loan balances remained elevated throughout the remainder of the year, spiking again in Q4 (with another wave of general credit spread widening).

According to interviewees, the repo market remains extremely challenged in the case of HY, which can largely be attributed to the investor profile and a reluctance to lend back securities into the market. This probably also explains why China corporate on-loan balances did not increase during the credit volatility involving the real estate sector (see figures 40 and 43). It is also an interesting observation that despite the general increase in on-loan balances over the 2021 period, and the concurrent widening of credit spreads in the underlying bond market, the cost of borrowing securities (with the notable exception of Vietnam) remained relatively low (see figure 41). A possible extrapolation could be good repo market supply, but perhaps also reflective of the fact that some segments of the market (e.g. China HY) are simply not borrowable at any price.

2020

Figure 40: Asia international credit on loan - average balances by country of issue19 20

Source: DataLend (February 2022)

2018

2019

2021

¹⁹ DataLend's definition of "country of issue" is the country/region where the security is issued.

²⁰ 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

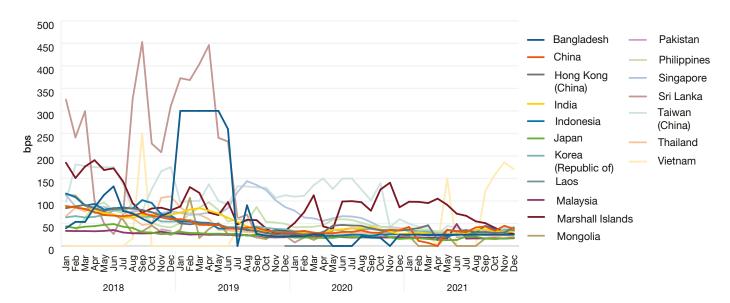


Figure 41: Asia international credit on loan - average monthly fees by country of issue

Source: DataLend (February 2022)

Market performance

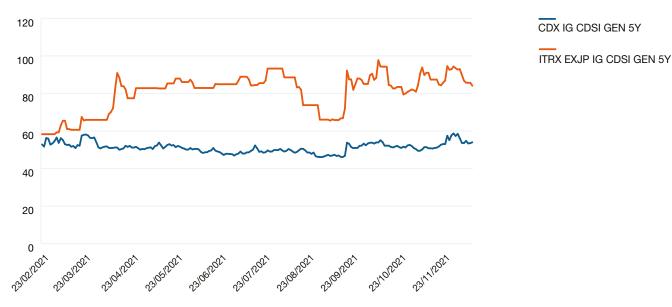
In the previous report it was pointed out how Asia G3 credit market spreads correlated more closely with US credit markets than underlying LCY credit, with a tendency to underperform in risk-off scenarios. That assertion would seem to hold true in 2021, with Asia credit tracking the general US and global widening trend, but with a higher degree of sensitivity (see figure 42).

This saw Asia international bond spreads, for both IG and HY, retrace fairly linearly following the March 2020 Covid shock, and consistently through mid-2021.

Where the Asia G3 credit market diverged more acutely in late 2021 was perhaps off the back of the Evergrande default, which raised concerns about the China real estate sector and high yield more generally (see figure 44). However, the views of interviewees are more measured, who point to the fact that Evergrande was a particular case, and that a more analytical assessment of the China HY risk-off reaction presented a good relative value buy opportunity.

As interviews were being undertaken in early 2022, as the prospect of the unwind of US quantitative easing and the likelihood of higher interest rates from the Federal Reserve, and possibly even the EU, were being discounted, interviewees seemed resigned to wider credit spread and increased volatility. However, a common view was that for an intrinsically relative value market, such as the Asia international bond markets, this would only mean a return to fundamentals and more opportunities for astute investors.

Figure 42: Index CDS for IG US and Asia Credit



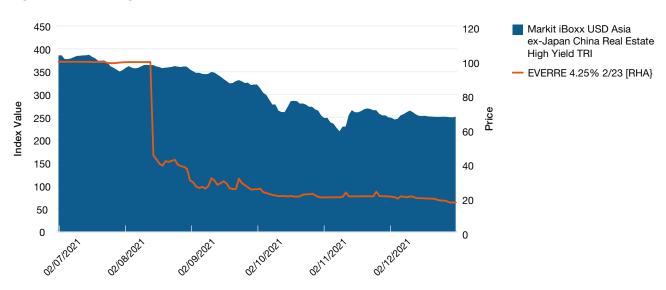
Source: ICMA analysis using IHS Markit²¹ data sourced from Bloomberg (February 2022)

Figure 43: iBoxx Credit Spreads (option adjusted)



Source: ICMA analysis using IHS Markit data sourced from Bloomberg (February 2022)

Figure 44: China High Yield Real Estate



Source: ICMA analysis using IHS Markit and Bloomberg data sourced from Bloomberg (February 2022)

Conclusion

The Asia cross-border bond market has seen remarkable growth in size since 2006. From the perspective of market supply, seasoned Asian issuers are increasingly tapping the cross-border bond market for funding and a steady flow of debut issuers are entering the market too, contributing to the diversification of the market in terms of issuer country-of-risk and sector lines. In particular, sustainable bonds were popular funding tools in 2021 for Asian issuers in the international bond market, helping issuers to diversify their investor base and raise capital for sustainability purposes at the same time.

Asian financial centres have also played significant roles in facilitating the development of international bond markets, by arranging and listing primary market issuances, as well as providing secondary market liquidity through the market making activities of the international and domestic banks.

Data and qualitative feedback from market participants suggest that secondary market activity has increased with improving liquidity in 2021 compared with the year before. The uptick in adoption of platform-based trading, together with increase in repo and securities lending activities of IG bonds, should further support the development of the Asia cross-border market.

Investors are also becoming ever more familiar and sophisticated with Asian credits. Despite some headwinds brought about by individual credit events in 2021, volatilities in the market have built up useful statistics and led market participants up the learning curve, reminding the market of risk diversification and a return to the fundamentals.

As the market structure, both primary and secondary, becomes more defined and efficient, we should expect the Asian international bond market to continue to expand and deepen.

Countries/regions included in Asia, by data source:

Trax data from MarketAxess: Armenia, Azerbaijan, Bangladesh, China, Georgia, Hong Kong (China), India, Indonesia, Kazakhstan, Korea (Republic of), Macau (China), Malaysia, Mongolia, Pakistan, Philippines, Singapore, Sri Lanka, Taiwan (China), Thailand, Vietnam.

ICMA applies the following list to DataLend data: Bangladesh, China, Fiji, Hong Kong (China), India, Indonesia, Japan, Korea (Republic of), Laos, Malaysia, Marshall Islands, Mongolia, Pakistan, Philippines, Singapore, Sri Lanka, Taiwan (China), Thailand, Vietnam.

ICMA applies the following list to Dealogic data: Bangladesh, Bhutan, Brunei Darussalam, Cambodia, China, Democratic People's Republic of Korea, Hong Kong (China), India, Indonesia, Japan, Kazakhstan, Kyrgyzstan, Laos, Macao (China), Malaysia, Maldives, Mongolia, Myanmar, Nepal, Pakistan, Philippines, Singapore, South Korea, Sri Lanka, Taiwan (China), Tajikistan, Thailand, Turkmenistan, Uzbekistan, Vietnam.

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