VIEWPOINT

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Addressing Market Liquidity
A Perspective on Asia's Bond Markets

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Since the 2008 global financial crisis, bond markets globally have attracted attention as new financial regulations have impacted market liquidity and brought about changes in market structure. We have written extensively on the US and the European fixed income landscape. We noted that many of the concerns relating to market liquidity reflect an ongoing evolution of global bond markets, as market participants adapt to structural changes.

Asian bonds are emerging as a distinct asset class in their own right. They warrant closer examination to better understand the dynamics of these markets as they evolve. This *ViewPoint* focuses on the market size, liquidity and ownership of local-currency (LC) markets. Given its increasing size and importance, the structure of the Chinese bond market is highlighted in a separate section. Then we outline the key parameters of the foreign (FC) markets in the region. We review the rise in importance of bond Exchange Traded Funds (ETFs) as additional source of liquidity to bond investors and the potential for development of this market segment in Asia. Finally, we offer several policy recommendations to help stimulate further growth in Asia's fixed income markets.

Key observations

Asia's fixed income markets differ from the US and Europe…

- The development of LC bond markets became a policy priority for many Asian economies post the region's 1998 financial crisis. However, it was the global financial crisis of 2008 that fueled growth in the region's LC bond markets.
- Government bonds continue to dominate in most Asian markets, accounting for an estimated 65% of total LC bonds outstanding.
- Domestic institutional investors are by far the largest holders in LC government bonds. Foreign institutional investors generally account for between 3% and 15% of the LC bonds outstanding in major Asian economies.
- The maturity profile of corporate bonds in the region is generally shorter than that of government bonds, and bonds outstanding are clustered in higher ratings, not covering the entire credit curve.

…while differences exist, many of the same themes we have identified in previous *ViewPoints* are observable and relevant in Asia.

- The growth in the size of Asia's LC bond market has not been matched with a similar improvement in liquidity. Assessed by bid-ask spreads liquidity can be characterized as improving, however as the growth in issuance has significantly outpaced increases in trading volume, turnover remains low.
- While each of the region's bond market mandates a form of post-trade transparency, similar to Europe, the data is neither standardized nor accessible on a single platform.
- Institutions around the world have started using ETFs to enhance portfolio liquidity amid a decline in overall underlying bond market liquidity.

Sizing Asia's LC bond market

The development of LC bond markets became a policy priority for many Asian economies post the region's 1998 Asian financial crisis. The crisis exposed the damage that using LC assets to pay maturing foreign-denominated debt can have on the private sector.

Relatively stable exchange rates before the crisis had encouraged firms to take short-term borrowings in FC to fund long-term investments, returns of which were tied to the value of their domestic currencies. In 1997, what had started as a currency crisis in Thailand quickly developed into a financial and economic crisis, and spread to other countries in the region. Currencies and asset prices in most countries dropped by as much as 30 to 40%. Since the corporate borrowings were often loans from domestic banks, sharp economic slowdown and numerous corporate bankruptcies led to bank failures during the crisis[1].

The Asian crisis played a catalytic role in creating active LC bond markets, but it was the global financial crisis of 2008 that fueled growth in the region's LC bond markets as a new source of funds for both government and corporate issuers. The region's governments turned to the LC bond markets to finance their fiscal stimulus packages in the post crisis economic slowdown. Corporate borrowers also resorted to issuing LC bonds as banks became reluctant to lend while liquidity in global markets dried up, particularly after the collapse of Lehman Brothers in 2008.

As of Q3 2016 the LC bond market in Asia has reached US$11.4 trillion in assets, up from US$2.6 trillion in 2005 (Exhibit 1). China is the largest LC bond market in Asia ex Japan, with outstanding bonds worth US$7.2 trillion, which account for just more than 60% of total bonds outstanding. South Korea holds a 17% share and India accounts for 10%.

Government bonds continue to dominate in most Asian markets, accounting for an estimated 65% of total LC bonds outstanding. South Korea is the only market where more corporate bonds are sold than government bonds.

The corporate bond market in South Korea has enjoyed significant growth thanks to its government's policies to foster development of the segment, dating back to the 1970s. Listed below are some developmental milestones:

- Introduction of bond guarantee in 1972, paving the way for the creation of the public placement market.
- Post the 1998 Asian crisis, the government raised the ceiling on an individual firm's corporate bond issuance from two to four times its equity capital and eliminated all the remaining restrictions on investment in domestic bonds by foreigners.
- Asset Backed Securities (ABS) were introduced in late 1998. Issuance increased dramatically from 1999 onwards, during the process of financial and corporate restructuring, until the emergence of credit card company insolvencies in 2003.
- The government intervened to support the corporate bond market in 2000 and in 2003 when financial conditions deteriorated sharply.[2] "The Korea Development Bank Prompt Underwriting Scheme" was introduced at the end of 2000 and lasted for one year. The total amount of corporate bonds issued through this scheme was KRW2.6 trillion (around US$224 billion)[3].
- In 2003, Bank of Korea announced measures to stabilize financial markets and injected liquidity through open market operations. The government also announced a comprehensive package of measures designed to address the liquidity problems of credit card issuers.
- Recently, the government took policy measures to facilitate the issuance of bonds with lower credit ratings, by introducing high-yield bond funds, launching qualified institutional buyers market, and stimulating collateralized debt obligations (CDO) issues backed by lower-grade bonds.

Away from South Korea, bank loans prevail as the main source of funding for business in Asia, accounting for around 50% of total financing (equity, bond and bank loan financing). As a way of comparison, US bank loans account for only about 30% of the overall US financing, according to a PWC report[4] that draws on Eurostat, OECD and The World Bank data. The EU historically has also relied much more on bank financing, with bank loans representing 50% of its overall financing. However, we note a structural shift in favor of public debt markets in the Euro area in BlackRock's 2016 *ViewPoint* "Addressing Market Liquidity: A broader Perspective on Today's Euro Corporate Bond Market".

Similar to the European markets, while bank lending continues to dominate corporate financing in many Asian economies, bond financing is gaining in prominence growing from US$682 billion in 2005 to US$4 trillion in Q3 2016 (Exhibit 1). The increased role of bond financing is beneficial for non-financial corporations and banks alike as corporates can diversify their funding structure, and banks can act as advisors earning revenue without adding pressure on their balance sheets.

Exhibit 1: LC debt outstanding (US$ billion)

	As of Q3 2016			As of Dec 2005			As of Dec 1995		
Economy	Sovereign	Corporate	Total	Sovereign	Corporate	Total	Sovereign	Corporate	Total
	4,969	2,209	7,178	835	65	900	58	NA	58
	777	1,109	1,886	393	361	754	67	NA	67
	833	288	1,121	377	85	461	87	7	94
	226	80	306	65	14	79	12	1	12
	153	130	282	61	46	107	NA	NA	NA
	134	97	231	47	36	83	13	8	21
	143	22	165	48	6	54	NA	3	3
	138	89	138	16	69	86	8	18	26
	82	17	99	41	1	42	NA	NA	NA
Total	**7,455**	**4,041**	**11,406**	**1,884**	**682**	**2,566**	**244**	**37**	**281**

Source: AsianBondsOnline as of December 1995, December 2005 and Q3 2016. As of December 1997 for China and as of December 2015 for India.

Sovereign bonds include: obligations of central governments, of local governments and of central banks. Corporate bonds include: public and private companies, including financial institutions. Financial institutions include: private and public sector banks, and other financial institutions. Bonds are defined as long-term bonds and notes, treasury bills, commercial paper, and other short-term notes.

Note: In this paper we mainly focus on the bond markets of eight countries in the region, countries that are prevalent in local currency bond indices: Bloomberg Barclays Emerging Markets Asia Local Currency Government Country Capped Index, Citi Asian Government Bond Index, J.P. Morgan Asia Diversified (Global).

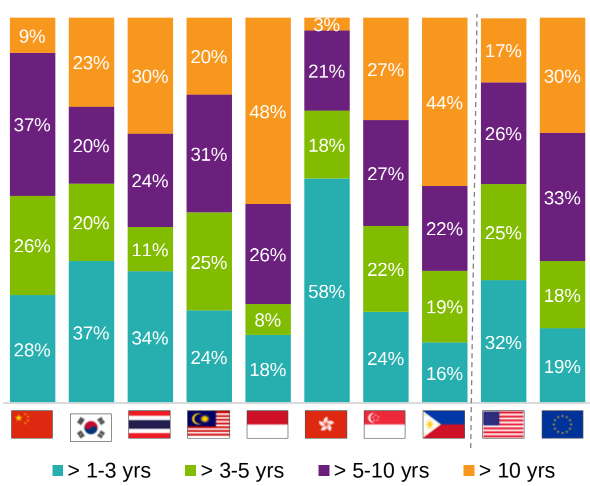
Note: Country flags are used throughout the paper:

China South Korea India Thailand Malaysia Singapore Indonesia Hong Kong Philippines United States of America Europe.

Characteristics of Asia's LC bond market

Government bonds outstanding in the region are generally distributed across maturities, not dissimilar to what is observed in US and EU. Hong Kong stands out with a striking 76% of its total government bonds outstanding with maturities of less than 5 years (Exhibit 2).

Exhibit 2: Maturity profiles of LC government bonds (average 2000–2016, %)



Source: AsianBondsOnline as of Q3 2016.

For United States of America and Europe data, ICE U.S. Treasury Core Bond Index and Barclays Euro Treasury Bond index breakdowns are used, as of Q3 2016.
Note: Chart is organized descending, by sovereign debt outstanding, Exhibit 1.

The Hong Kong Government maintains a strong fiscal position and does not need to finance its expenditures by issuing government bonds. The Government Bond Programme launched in 2009, was designed to issue government bonds in a systematic and consistent manner, with the objective of promoting sustainable development of the LC bond market. Under the programme, the Hong Kong Government is not subject to any rigid issuance target, with flexibility over the size and the tenor of individual government bond issues, accounting for prevailing market conditions and demand.

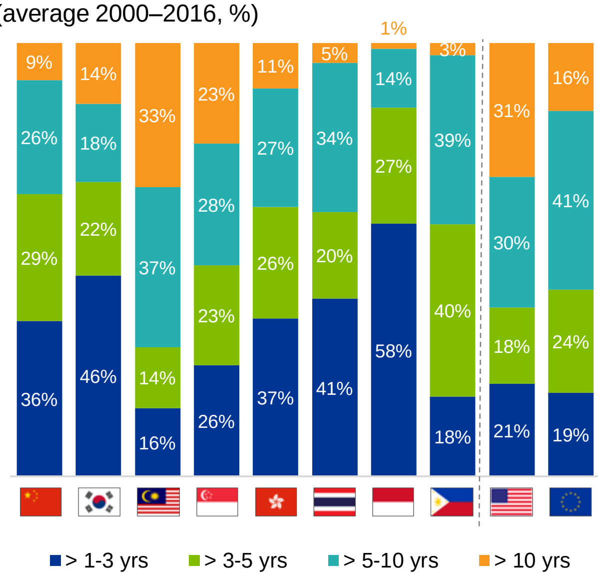
Several countries have invested in building up their government yield curves systematically for the purpose of developing their bond markets. Two prominent examples are South Korea and Singapore. In 2000, the South Korean government launched the Fungible Issue System. Under this system, the coupon rates and maturities of Korean Treasury Bonds (KTBs) issued over certain periods of time are standardized. Prior to 2000, maturities and coupon rates differed each time KTBs were issued. This led to too many KTB types with low liquidity since the amount of issuance of each type was rather small. The Fungible Issue System addressed this and also helped to stabilize the reference interest rate. This was followed in 2009 by a KTB conversion offer system where off-the-run (old issuances) KTBs were exchanged for on-the-run securities (most recent issuance).

The Singaporean government similarly embarked on an effort to build a liquid government yield curve to act as a price discovery mechanism for issuers and investors. The government achieved this by progressively expanding the yield curve, issuing bonds with longer maturities (such as 10-year, 15-year, 20-year and then 30-year). In addition, it also established a public calendar of issuance so that the exact size of each treasury bill and bond issue is made known one week before the auction.

To build their yield curves, Indonesia and the Philippines have structured their government debt since the early 2000s with longer maturities. As such, government bonds with maturities of more than 10 years are the largest segment of their markets.

The maturity profile of the corporate bonds in the region is generally shorter than that of the government bonds. With the exception of Malaysia, the Philippines and Singapore, more than 60% of corporate bonds in other Asian economies have maturities of less than 5 years (Exhibit 3).

Exhibit 3: Maturity profiles of LC corporate bonds (average 2000–2016, %)



Source: AsianBondsOnline as of Q3 2016.

For United States of America and Europe data, ICE U.S. Treasury Core Bond Index and Barclays Euro Treasury Bond index breakdowns are used, as of Q3 2016.

Note: Chart is organized descending, by corporate debt outstanding, Exhibit 1.

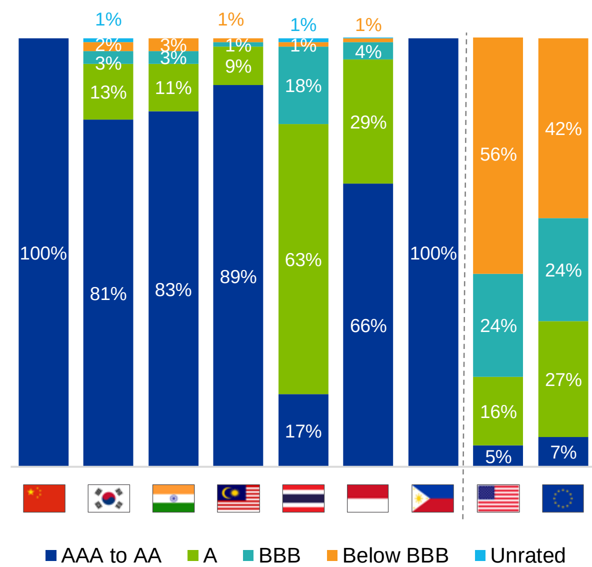
Extending the maturity profile of corporate bonds has been one of the major long-term goals in many Asian markets. Over the past decade or so, medium to long-term issuance has increased according to Asia Development Bank (ADB) research[5]. This trend continued with the onset of the 2008 global financial crisis and the subsequent low interest rate environment which allowed for longer-dated issuance at attractive levels.

Corporate bonds in Hong Kong and Malaysia are proportionately less short-term and more long-term than their local government bonds. This may be due to the fact that many of the corporate issuers in the two economies are in the property development, energy, and infrastructure sectors which require longer-term financing.

One aspect in which corporate bond markets have not developed greatly in Asia is in the range of credit quality available to investors. Existing corporate bonds are clustered in higher ratings and do not cover the entire range of the credit curve.

In China and the Philippines, effectively all LC corporate bond issuance is rated either AAA or AA by the main local rating agencies. In Indonesia, Korea and Malaysia, the share in the AAA/AA category ranges between 80% and 90%, with the balance of remaining issues mostly at A. Thailand is the only country in the region where A rated securities dominate the bonds outstanding (Exhibit 4).

Exhibit 4: Credit ratings by local rating agencies for LC corporate bonds (as % of number of LC corporate bonds issued, 2010–Q3 2015)



Exclude issuers categorized as "Banks", bonds issued by development banks and bonds without credit rating on Bloomberg. Local credit rating agencies: Dagong Global Credit Rating for China, PEFINDO for Indonesia, NICE Group for South Korea, PhilRating for the Philippines, MARC or RAM rating for Malaysia, TRIS Rating for Thailand, CARE rating for India. For comparison purpose, the ratings by these rating agencies have been harmonized to represent the graph above with issuer ratings by Standard & Poor's.

Source: BIS Papers No 85 as of Q2 2016

Note: Chart is organized descending, by corporate debt outstanding, Exhibit 1.

In contrast, more than 50% and 40% of US and European credit markets respectively are below investment grade, according to S&P. Nearly a quarter of all issues carry the lowest investment grade rating of BBB. In the US only about 5% of issues are rated AAA or AA. The Euro area records an only slightly greater fraction at 7%.

One of the potential explanations for a higher credit rating concentration in the region is that the distribution of local agencies' ratings tend to be higher than that of the global agencies. FC corporate ratings are generally capped by sovereign ratings, usually one notch below the ratings given to the sovereign debt. Local rating agencies, however, usually do not consider their own sovereign rating as a cap when rating LC bonds.

Equally, it is important to note that the corporate bond market acts as a financing platform not only to private sector firms but also to government projects. State-owned companies continue to be important players in Asian corporate bond markets, with some 40% of Asian corporate bond issuance undertaken by public entities based on Bloomberg data as of Q3 2016.

For state-owned enterprises, international rating agencies usually do not make assumptions about government support, which is the case for ratings granted by the local rating agencies.

Lastly, the shift of demand post the 2008 global financial crisis to higher rated paper is likely to be one of the additional drivers of higher credit rating distributions. During the crisis, several bond defaults weakened investor confidence in the corporate bond market, leading to investors strengthening their credit rating criteria for inclusion of corporate bonds in portfolios.

LC bond market development initiatives

The rapid growth of Asia's LC bond markets has been partly an outcome of the region's efforts and initiatives to establish domestic government bond markets.

Encouraged by regional organizations such as the Asia-Pacific Economic Cooperation (APEC), the Association of Southeast Asian Nations (ASEAN) and the Asian Development Bank (ADB), Asia's markets have benefitted from increased openness, and a range of reform efforts over the last two decades.

Various initiatives (Exhibit 5) have made a contribution to and strengthened regional cooperation among Asian countries. The primary focus of these initiatives has been on developing liquid LC sovereign bond markets through: promoting issuance of bonds denominated in local currencies, facilitating demand for local currency-denominated bond issuances, improving the regulatory framework and related market structure for the bond markets and increasing secondary market liquidity.

The corporate bond segment did not receive as much attention given its much smaller size versus the government bond markets historically. Equally it was believed by the local authorities that the development of government bond markets would over time also benefit the development of the corporate bond market.

Exhibit 5: LC bond market development initiatives timeline

Year	Initiatives
2002	Asian Bond Market Initiative (ABMI) is launched under ASEAN+3 to develop a liquid and well-functioning LC bond market.
2003	Asian Bond Fund 1 (ABF1) is launched by central banks of the Executives' Meeting of East Asia and the Pacific (EMEAP) countries to invest pooled savings in the US dollar denominated sovereign and quasi-sovereign debt issued eight member economies (China, Hong Kong, Indonesia, South Korea, Malaysia, the Philippines, Singapore and Thailand). ABF1 pooled US$1 billion of international reserves from the participating eight central banks.
2004	ABMI launches AsianBondsOnline as a one-stop data and information portal for institutional investors, policy makers and researchers participating in LC debt markets.
2005	Asian Bond Fund 2 (ABF2) extended the ABF1 concept with US$2 billion invested in sovereign and quasi-sovereign issues denominated in local currencies in the same eight markets.
2008	ASEAN+3 ministers sign the New ABMI Road map to set up task forces to address specific issues in local bond market development.
2010	ASEAN+3 establishes the Asian Bond Market Forum (ABMF) as a platform to foster standardization of market practices and the harmonization of regulations relating to cross-border bond transactions in the region, including for corporate bonds.
2010	The Credit Guarantee and Investment Facility (CGIF) launched as a trust fund within the ADB to provide credit enhancement to promote larger and cross-border corporate bond issues. CGIF started operations in 2012, with authorized capital of US$700 million.
2013	ASEAN+3 establishes the Cross-Border Settlement Infrastructure Forum (CSIF) to discuss the preparation of a road map and an implementation plan for the improvement of regional cross border settlement infrastructure.
2015	ABMF releases implementation guidelines for the ASEAN+3 Multi-Currency Bond Issuance Framework (AMBIF), which helps facilitate intraregional transactions through standardized bond and note issuance, and investment processes.

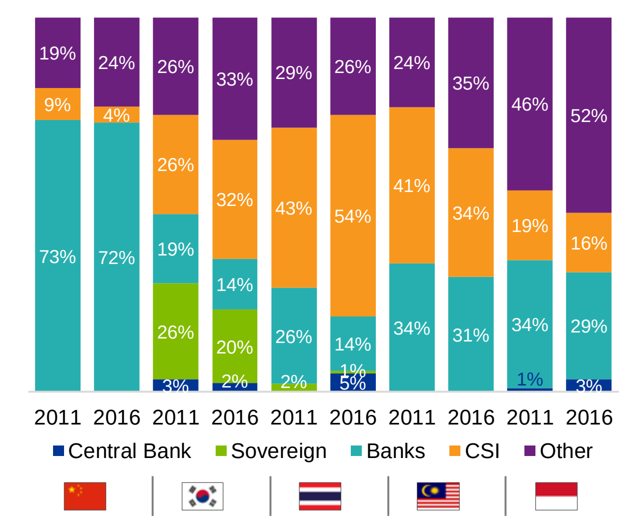
Source: "Developing Local Currency Bond Markets in Asia" ADB Economics Working Paper Series No. 495, Q2 2016

LC government bond market investor base

Before the 2008 global financial crisis, most government bonds were bought by domestic banks, according to ADB research[6]. The growth of local institutional investors has led to a broadening of the investor base over time. The growth of local institutional investors was driven by the region's economic growth, overall per capita income increases and high savings rates. This has resulted in significant pools of capital available to invest in LC bond markets. A lack of supply and other market impediments, rather than insufficient demand, are the greater obstacles to further LC bond market growth, as observed by another ADB paper[7].

The combined average share of holdings away from regional banks, central bank and sovereign entities was 62% of total government bonds in Indonesia, South Korea, Malaysia and Thailand. The 62% average share compares to 56% five years earlier (Exhibit 6). Chinese government bonds are still largely held by local commercial banks with an estimated 70% share.

Exhibit 6: Investor profile LC government bonds



Source: AsianBondsOnline as of Q1 2011 and Q1 2016.
CSI institutions include: national provident funds, life insurance companies, private pension funds, funded social pension insurance systems, including foreign investors. Category "Other" is not broken down in the AsiaBondsOnline data.
Note: Chart is organized descending, by sovereign debt outstanding, Exhibit 1.

Institutional investors in these economies have modest exposure to LC bonds of neighboring countries. For the most part, the lack of cross-border investment is due to a lack of interest, since a large portion of their liabilities are in local currencies. Domestic institutional investors are by far the largest holders in LC government bonds.

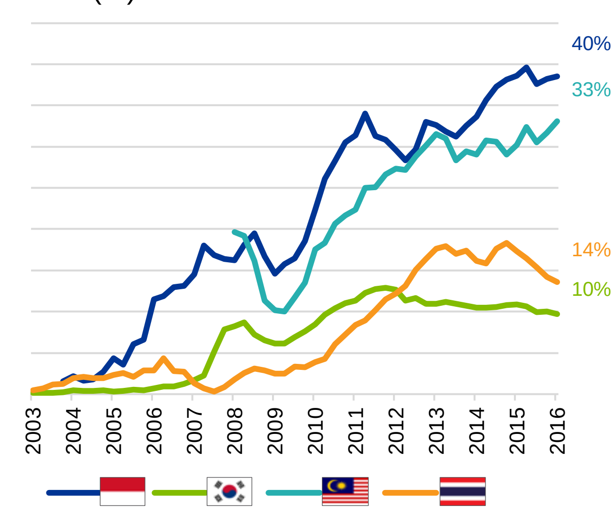
Foreign institutional investors generally account for between 3% and 15% of the LC bonds outstanding in major Asian economies.

Four broad factors drive foreign investor interest:

- **Macroeconomic factors**: The attractiveness of a country from a valuation perspective. Attractive long-term growth prospects, high yields, potential for currency appreciation and improving credit fundamentals are some examples.
- **Government factors**: Political stability, central bank independence, regulatory openness and consistency. Investors are more likely to have confidence in markets where these are present.
- **Trading, clearing and settlement**: The ease with which investors can access and trade in a market. Free capital mobility, high levels of market liquidity, availability of interest rate and currency hedging instruments, an absence of taxes on investment income and capital market transactions and efficient clearing and settlement systems are positive factors that investors prefer.
- **Benchmark factors**: The demand for bonds of a particular country due to its inclusion in an index. The more widely a benchmark is used and the higher the weighting of a country in that index, the greater the demand for the debt securities of that country.

Markets like Indonesia and Malaysia are examples with substantial foreign holdings, 40% and 33% share respectively (Exhibit 7).

Exhibit 7: Foreign holdings in LC government bonds (%)



Source: AsianBondsOnline as of Q3 2016.

The Indonesian and Malaysian local bond markets are easy to access by foreign investors. Both countries are investment grade rated[8], with attractive yields compared to the other Asian economies[9]. And both countries are present in major local currency Emerging Markets indices. All of the above cumulatively have helped drive foreign demand.

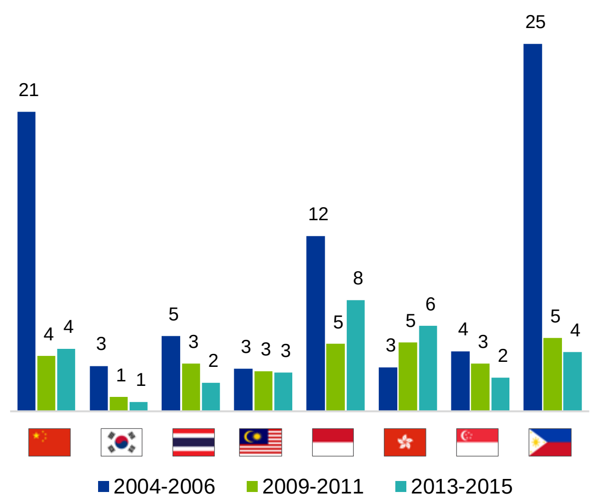
Assessing Asia's LC bond market liquidity

Market liquidity can be defined as a market's ability to facilitate the purchase or sale of an asset without causing a change in the asset's price (i.e., market impact). An assessment of market liquidity can fluctuate based on technical conditions in markets. The market structure and settlement cycle for an asset class can also impact market liquidity.

A market with a large percentage of bonds that are liquid would represent high market breadth. Market capacity, or depth, is the amount of assets that can be traded at a "reasonable price" over a period of time. What is a reasonable price is debatable. While in theory, a security may have an "intrinsic value", in reality a security can only be sold at a price a buyer is willing to pay.

With variations across the region, Asia LC government bond market liquidity can be characterized as improving. Bid-ask spreads have narrowed in each market over time, with the exception of Hong Kong (Exhibit 8).

Exhibit 8: LC government bond bid-ask price spreads (average over period, basis points)



Source: AsianBondsOnline, data available only till Q4 2015.

Bid–ask spreads represent the difference between the highest price that a buyer is willing to pay for a security (bid) and the lowest price at which a seller is willing to sell (ask).

Note: Chart is organized descending by sovereign debt outstanding, Exhibit 1.

Trade volume (Exhibit 9), has also improved over time. However, the growth in the number of bonds outstanding has significantly outpaced increases in trading volume, resulting in low turnover[10]. The growth in the size of Asia's LC bond market has not been matched with a similar improvement in liquidity. The liquidity for corporate bonds is even less favorable. Trading volume and turnover ratios are much lower than for government bonds, with both metrics deteriorating since 2005.

Consolidation of issuance in a few benchmark maturities, lowering of barriers to participation by non-resident investors and an increase in market making activity are some examples of factors that play an active role in improving bond market liquidity. Whereas the region needs to invest in evolving the structure of its bond markets, the structural changes to bond market liquidity in Asia due to evolving broker-dealer business models is not dissimilar to the global landscape.

Deleveraging across the financial system is ongoing. International broker-dealers' trading inventories have been markedly reduced and market making activities are more constrained than before. This is driven mainly by the increased capital requirements under Basel III and the elimination of proprietary trading resulting from regulatory reforms such as the Volcker Rule in the US.

The decreased participation of international investment banks has led to the emergence of a new class of boutique electronic trading firms. Firms such as Tradeweb and MarketAxess have offered niche services such as electronic trading and information exchange. In addition, increased participation from local players that are not subject to the same regulatory requirements as global players has added to the liquidity picture.

The combined impact of regulatory and technology shifts is changing the practices and behavior of bond market trading and the toolkit required to operate within it. The bond market, which traditionally has been a "principal", over-the-counter market, is beginning to supplement this principal trading structure with more agency-like activities. Asset owners are increasingly becoming "price makers" rather than "price takers". Execution risk, which in the principal market resides with the broker-dealer, is increasingly sitting with the asset owner. To be clear, being a "price maker" is not the same as being a "market maker". A "price maker" is a market participant that expresses a price at which he or she is willing to buy or sell a particular security at a given time.

In contrast to the principal market, in the "agency" market, the purchase or sale transaction is brokered and the compensation for this brokerage is an explicit commission. The asset owner bears the execution risk. Bid-ask spreads are also becoming a less meaningful measure of liquidity, as the ability to transact fully by paying a bid-ask spread has diminished.

The new trading landscape has meant adjustments for asset holders, who need to streamline operations to deal with multiple trading venues, monitor disparate liquidity pools and increasingly leverage new liquidity aggregating technology.

Exhibit 9: LC secondary bond market indicators

	Trading volume (US$ billion)				**Turnover ratio**			
	Q3 2016		**2005**		**Q3 2016**		**2005**	
Economy	Sovereign	Corporate	Sovereign	Corporate	Sovereign	Corporate	Sovereign	Corporate
	3,239	353	214	40	0.6	0.3	0.3	0.7
	402	105	270	57	0.6	0.1	0.7	0.2
	154	5	22	1	0.7	0.1	0.4	0.0
	62	11	20	7	0.4	0.1	0.3	0.2
	43	na	30	NA	0.5	NA	0.6	NA
	68	5	6	0	0.6	0.2	0.2	0.1
	92	12	246	2	0.6	0.2	15.2	0.0
	39	na	12	NA	0.5	NA	0.3	NA

Source: AsianBondsOnline as of Q3 2016. Philippines as of Q4 2015.

Turnover ratio: the ratio shows the extent of trading in the secondary market relative to the amount of bonds outstanding. Calculated by dividing trading volume over a defined period by quarterly average of debt outstanding. The higher the turnover ratio, the more active is the secondary market.

An important caveat when referencing the above statistics is that in Asia, there is currently no consolidated tape for fixed income trading. For the purposes of this *ViewPoint*, the data is sourced from AsianBondsOnline that draws turnover figures from a variety of sources that may have differences in methodology.

Note: Chart is organized descending, by sovereign debt outstanding, Exhibit 1.

LC market access

Barriers that most directly affect foreign investor participation in LC markets include capital controls, investor registration rules, limits and administrative procedures on foreign exchange transactions, availability of FX and interest rate hedging instruments, withholding taxes and cross-border clearing and settlement systems.

There are no major access barriers for entry to foreign institutional investors in most LC bond markets in the region, with the exception of China and India.

China: Investors in Chinese government bonds are largely by local commercial banks, which hold an estimated 70% share. Foreign holdings currently stand at approximately 3% of amount outstanding, based on ADB data as of Q3 2016. Debt securities denominated and traded in RMB are exclusively reserved for mainland resident investors, except for access through the programs listed below:

Qualified Foreign Institutional Investor (QFII) programme launched in 2002 and RMB Qualified Foreign Institutional Investor (RQFII) programme launched in 2011:

- License and quota are granted to a licensee.
- Licensee can access both exchange traded bonds and bonds traded in the China Interbank Bond Market (CIBM).
- Investments qualified: Listed bonds and futures, CIBM traded bonds and China A-Shares on both Shenzhen and Shanghai exchanges.

CIBM Direct Access scheme launched in 2016:

- People's Bank of China (PBoC) announced on February 24, 2016 the easing of access into the CIBM with a simple filing to PBoC to get approval to use the CIBM Direct Access scheme without the need for quota.
- Investors can remit RMB or other foreign currency into China for investment and repatriate in RMB or other foreign currency.

India: Foreign Portfolio Investors (FPIs) are limited to owning up to 4% of the total outstanding rupee-denominated federal government bonds. This quota is currently exhausted. The limit will be raised to 5% by March 2018 according to India's central bank. India also allows foreign investors to own up to 4% of local corporate bonds and this limit remains unchanged.

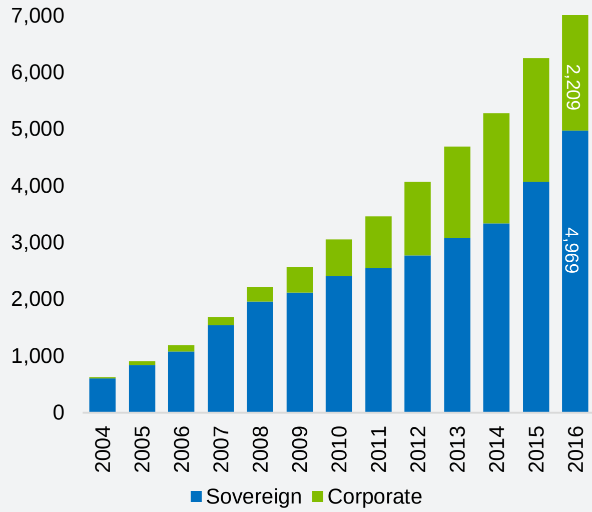
FPIs include investment groups of Foreign Institutional Investors (FIIs), Qualified Foreign Investors (QFIs) and subaccounts. According to Securities and Exchange Board of India (SEBI), "an FII is an institution that is registered under the Securities and Exchange Board of India Regulations 1995, established or incorporated outside India, which proposes to make investments in securities, in India". QFI is an individual, group or association resident in a foreign country. The QFI's domicile country should be compliant with the Financial Action Task Force standards and should be a signatory to the International Organization of Securities Commission.

The above not to be relied upon as investment, regulatory or any other advice.

China’s bond market overview

The Chinese bond market is the largest among Asian economies covered in this *ViewPoint*, with government and quasi-government bonds dominating its issuance (Exhibit 10).

Exhibit 10: China outstanding onshore bonds
(US$ billion)



Source: AsianBondsOnline as of Q3 2016.

Bond trading occurs either in the China Interbank Bond Market (CIBM) or on the Shanghai and the Shenzhen Stock Exchange (the Exchange).

CIBM: A quote-driven, over-the-counter market whose primary participants are accredited market dealers, financial institutions and the PBoC. The latter conducts its open market operations in this market . Open market operations are by agreement between PBoC and primary market dealers.

Trading takes place via the China Foreign Exchange Trade System and National Interbank Funding Center (CFETS), which is the unified trading, settlement and clearing platform for the interbank bond market. Trades are mostly done through bilateral negotiation and/or “click-and-deal”. CFETS also provides an automatic trade matching function.

The Exchange: An order-driven market traded on both the Shanghai and the Shenzhen Stock Exchange. Major participants include securities companies, insurance companies, securities investment funds, trust and investment companies, credit cooperatives, other non-financial institutional and individual investors. The PBoC does not trade in this market and commercial banks are not allowed to access this market.

The China Securities Depository and Clearing Co. (CSDCC) is the sole national securities depository, clearing and registration company for securities traded on the Exchange.

There are six major types of instruments traded. Instruments traded on both CIBM and the Exchange:

I. Ministry of Finance (MOF) issued China Government Bonds (central and local government)
II. Corporate bonds issued by domestic corporations

Instruments traded on CIBM only:

I. PBoC paper
II. Financial bonds issued by government-backed policy banks and financial institutions
III. Commercial paper issued by either securities firms or private corporations
IV. Medium-term notes

Bond market supervision and regulation is shared by several agencies:

The State Council Securities Commission is the main regulatory authority for capital markets. The *China Securities Regulatory Commission* (CSRC) is its executive arm. CSRC takes charge of vetting issuances of corporate bonds by companies publicly listed on the stock exchanges.

The National Development and Reform Commission (NDRC) serves as the macroeconomic management agency. NDRC approves and regulates the debt instrument issuances of non-listed enterprises, which are normally large state-owned enterprises.

PBoC, as the lead monetary authority, formulates and implements monetary policy, resolves identified financial risks and safeguards financial stability. It regulates and supervises the interbank lending and the interbank bond markets. Together with associated government agencies, PBoC approves the sale of short-term corporate bills and commercial paper issued by securities firms.

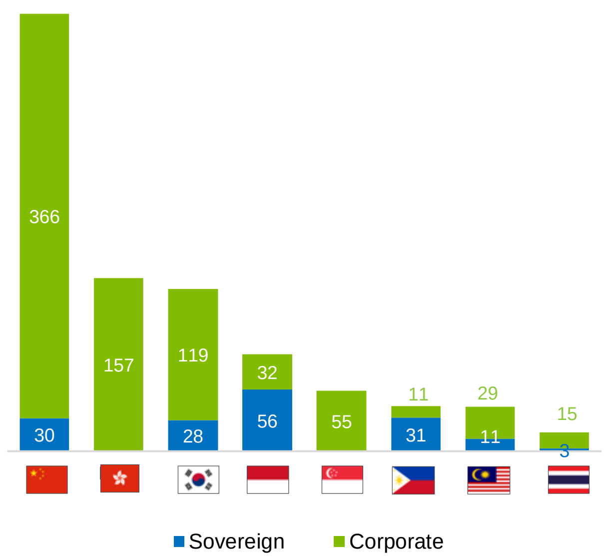
The China Banking Regulatory Commission (CBRC) supervises and regulates all deposit-taking institutions and related asset management companies. CBRC and PBoC jointly approve bond issuances by commercial banks, including securitization of financial assets and bank guarantees for corporate debt issuances.

MOF formulates and implements strategies, policies, guidelines and schedules public borrowings. MOF also approves RMB bond offerings by foreign development institutions, together with the **State Administration of Foreign Exchange (SAFE)** as the approving body for QFII and RQFII investment limits.

FC denominated Asia bond market overview

The FC Asia bond market represents bond issuance denominated in currencies other than the home currency issued by sovereigns, supranationals or corporates. From the eight countries covered in this *ViewPoint*, currently China, Korea, Indonesia, Philippines, Malaysia and Thailand offer sovereign debt denominated in USD (Exhibit 11).

Exhibit 11: FC bonds total outstanding
(US$ billion)



Source: AsianBondsOnline as of Q3 2016.

Overall, FC bonds outstanding in the region have seen a steady increase, with US$940 billion as of Q3 2016, although still standing at much lower levels than that of LC bonds. Investment grade debt accounted for the bulk of total debt outstanding with an estimated 60% share, followed by high yield debt with around 17% share and the remaining portion of debt as unrated, based on Bloomberg data as of Q3 2016.

China has become the largest FC bond issuer in the region partly attributed to RMB appreciation against the USD and higher borrowing costs in China prior to 2014. In addition, continued overseas M&A deals by Chinese companies encouraged more FC bond issuance to finance such activities, according to AMRO research[11].

Away from government bonds, financials is the largest sector, accounting for 60% outstanding FC paper, with banks representing 70% of the issuers. Singapore and Hong Kong are the most active regional issuers in the sector, reflecting their status as regional financial centers, based on Bloomberg data as of Q3 2016.

Financials are the largest issuers of Asian FC bonds, not dissimilar to global issuance of FC bonds. Financial corporates often have different motivations for issuing FC bonds from those of non-financial corporates (NFC). If FC borrowings are uncovered by day-to-day operations, cost savings are an important influence on the issuance decision. Financial issuers will be most responsive to these cost savings and have the market knowledge necessary to exploit such savings. These costs savings are evaluated in terms of their two main component parts: nominal interest rate differentials and expected exchange rate depreciation of the issuance currency.

Meanwhile, the empirical literature[12] shows that non-financial issuers are concerned mainly with the need to find a natural hedge (financial obligations are in currencies that match the currencies of its cashinflows). Otherwise, NFCs that use FC bonds to fund local currency operations are faced with currency mismatch risks, i.e., the mismatch between the FC that a corporate is borrowing in and its stream of domestic currency income. If unhedged, FC appreciation may increase NFC liabilities.

NFCs can use financial hedging to mitigate currency mismatch risks; however, appropriate instruments need to be available in the respective markets. Additionally, several factors could still give rise to currency losses for NFCs and an FC funding crunch during periods of stress. Potential fluctuations in overseas earnings could affect the ability to service FC debt, relatively high financing costs of hedging in some regional economies could deter NFCs from using hedging instruments and liquidity in hedging markets can decrease during times of market stress.

Regional post trade transparency

Similar to developed markets, Asian jurisdictions are making efforts to increase post-trade transparency (Exhibit 12). The term "transparency" as applied to security markets refers to the amount and timeliness of information provided to the investing public regarding prices and quantities of securities transactions.

Each market covered in this paper has developed its own electronic platforms that enable straight-through-processing. However, the transparency regimes in Asia are fragmented. While each of the markets mandates a form of post-trade transparency, the data is neither standardized nor accessible on a single platform.

Consolidated trading information is not available in the way TRACE makes it available for bond trades in the US and MiFID proposes to do for European bonds.

The launch of a pilot platform for cross-border clearing and settlement of debt securities in Hong Kong and Malaysia is a good example to note. The platform aims to strengthen post-trade infrastructure and promote the standardization and dissemination of corporate announcements across Asian markets.

Exhibit 12: Arrangement of post trade transparency (PTT)

Country	Reporting mandatory for OTC trades	PTT requirements for government & corporate bond trades over platform	Coverage	Timing	Information dissemination and availability
(interbond market only)	There is no reporting mechanism, but PBoC requires all transactions on the interbank bond market to be done in the China Foreign Exchange Trade System (CFETS)	Yes (CFETS)	Price, volume. Account and settlement type, delivery time reported but not shown	At end of trading day	Chinabond (Govt/Govt affiliated, banks, some corp bonds). Chinamoney (money market/bond market/derivative market data) (limited English, public info). Shclearing (CP, SCP, MTN, SMECN, PPN, ABN) Wind (Chinese, subscription only).
	No. Except for listed bonds traded off-market or unlisted bonds traded on ATS (Automated Trading Services)	Yes	Generally price and volume, however depends on nature of ATS	NA	CMU HKMA for Govt/Govt affiliated, banks, MTN, CP, corp bonds (public info). Hong Kong Stock Exchange for Govt/Govt affiliated, MTN, CP, corp bonds (public info). Information vendors, e.g., Bloomberg, Reuters (subscription only). ATS, Central Moneymakets Unit, Treasury Markets Association (public info).
	Yes	No platform. All OTC trades need to be reported to Indonesia Stock exchange (IDX), and IDX will publish data on their website	Price, volume, settlement date, trade date. Counterparty is reported, but is not made available public	30 minutes after the trade is concluded	Indonesia Bond Pricing Agency IBPA (subscription only). Indonesia Stock Exchange (IDX) http://www.idx.co.id/id-id/beranda/informasipasar/obligasidansukuk/laporantransaksiotc.aspx (public info). Available in Bloomberg (subscription only), QRM function for each series (trade date, notional, price).
	Yes. Korea Financial Investment Association (KOFIA) requires dealers to report all bond transactions (corporate and government bonds)	Yes. KOSCOM CHECK Terminal	Price, volume, trade date, time, settlement date, counterparty type, bond yield, size, direction, bond code (ISIN)	1999: 30 minutes Since 2004: 15 minutes after trade, real time reporting by KOFIA	Korea Exchange. Local info terminals (Korea Bond Web, Check, Infomax) (subscription only). KOFIA - http://www.kofiabond.or.kr/index_en.html (public info).
	Yes	Yes. Bursa Malaysia's Electronic Trading Platform (ETP), previously BIDS. All OTC bond trades are reported into ETP	Price, volume. Settlement date, account, client name reported not shown	Within 10 minutes of trade execution	Malaysia Bond Info Hub (near real time).http://bondinfo.bnm.gov.my/portal/server.pt (public info). Bloomberg and Reuters (subscription only). Bond Pricing Agency Malaysia (subscription only).
	Yes	PDEx	Price, volume, trade date	Real time market participants, within 15 minutes of trade	Philippine Dealing Exchange (PDEx) is the PHI bond market's Self-Regulatory Organization (SRO) and the only bond exchange. PDEx is the only one that can calculate market statistics in real time. PDEx publishes data on their website with a 15 minute delay http://www.pds.com.ph/ (public info). Data is streamed to Reuters and to a certain extent to Bloomberg (subscription only).
	Yes. Government securities only	SGS Electronic Trading platform (SGS) on Bloomberg	Price, volume, settlement date, trade date	Real time	Bloomberg page SGSM (subscription only). Monetary Authority of Singapore (MAS) has transparency over the SGS transactions as almost all SGS transactions are settled through MAS Electronic Payment System (MEPS), administered by MAS. There are a few cases through Euroclear/Clearstream.
	Yes	Thai BMA	Price, volume, settlement date, trade date. On an aggregated basis	30 minutes after the trade is concluded	Thailand Bond Market Association (ThaiBMA) (with some information disclosed only to ThaiBMA's subscribers). Trade by trade is not available publicly, only summaries are available.

For illustrative purposes only, not to be relied upon as investment, regulatory or any other advice. Source: Blackrock as of Q3 2016

Bond ETFs and their future scope in Asia

In our July 2015 *ViewPoint*, "Bond ETFs: Benefits, Challenges, Opportunities" we outlined the benefits of bond ETFs to bond market liquidity. We noted that ETF trading offers a vision of the future state of the bond market, exhibiting low cost, transparent, electronic trading in a standardized, diversified product.

The conclusions from that *ViewPoint* include:

- ETFs can help enhance price discovery, provide investors with low execution costs to establish a diversified portfolio, and increase bond market liquidity and transparency.
- ETF liquidity is incremental to the underlying bond market liquidity because buyers and sellers can offset each other's transactions without necessarily having to trade in the underlying market.
- Even during periods of market stress, ETF shares are at least as liquid as the underlying portfolio securities.

Globally, Fixed Income ETFs grew from only 17 ETFs with US$6 billion AUM in 2003, to over 780 ETFs with more that US$600 billion in AUM as of Q3 2016, based on the "BlackRock ETP Landscape" publication.

The North American ETF market dominates in terms of size and continues to experience significant inflows, with a total of US$450 billion in assets. The European Fixed Income ETF market, while smaller relative to North America, is growing at a fast pace with total assets at US$141 billion. Asia is currently the smallest ETF market, with Fixed Income ETF assets at US$15 billion.

It is important to note that in Asia, compared to North America and Europe, investors are largely able to purchase ETFs listed in other regions. Accounting for non-Asia domiciled ETF usage, the assets stand at a much higher number. For example, purchases of globally listed iShares Fixed Income ETFs by Asian domiciled investors stand at around US$16 billion as of Q3 2016, based on BlackRock estimates.

ETFs are being used for a wide variety of strategic and tactical applications. The two most common uses, according to the Greenwich Associates paper "ETFs Take Root in Asian Institutional Portfolios"[13], are strategic in nature: obtaining core investment exposures and international diversification within portfolios. These strategic uses of ETFs by Asian institutions are being adopted at a much faster pace than they were in North America and Europe.

In fixed income, institutions around the world have started using ETFs to enhance portfolio liquidity amid a decline in overall underlying bond market liquidity. Asian institutions' need for liquidity to support their sizable fixed-income portfolios could speed up the adoption of bond ETFs in the region.

According to the Greenwich Associates paper, ETFs make up only about 1.4% of Asian fixed-income assets, and only about a third of Asian institutions employ bond ETFs. If Asian investors follow the example of US and European institutions, and broaden ETF allocations to include fixed income, it will have a profound impact on the size of ETF holdings in the region.

The data from Greenwich Associates research show that fixed-income ETFs are attracting new users in Asia. Twenty-eight percent of institutional bond ETF users in the study started investing in these funds in the past year. Institutions say they are attracted to fixed-income ETFs by three main features: quick access, single-trade diversification and liquidity. The survey indicates that demand will also grow organically as investors learn more about bond ETFs and the role they can play in their portfolios.

Away from globally sourced exposures, development of a sound local ETF market is important for the growth of the overall Asian bond market. It is equally important for investors that are looking for solutions to address the liquidity challenges faced in the local markets.

Product innovation in Asia lags other regions due to the immaturity of the markets and regulatory hurdles. Another aspect inhibiting the growth of fixed income ETFs in Asia, specific of the insurance sector, is the treatment of ETFs in solvency calculations. In the US and Europe, a look-through is allowed for fixed income ETFs so that insurers receive credit for their bond ETFs as a portfolio of fixed income securities and not as an equity security. While some progress has been made in South Korea and Singapore, Asian insurers elsewhere receive punitive charges for fixed income ETFs and are therefore less likely to use them.

In the retail space, distribution remains a challenge in Asia, where the use of retrocessions encourages allocations to mutual funds rather than ETFs. Additionally, only a limited number of Asian ETFs are cross listed in other markets in Asia.

Asia is poised for growth particularly if markets become more integrated and regulations are further enhanced and streamlined to facilitate not only innovative products but also access to ETFs.

Developments ahead

Asia has come a long way in building its regional bond markets, but significant variations remain across the region. Arguably, there is not such a thing as a harmonized Asian bond market. Despite fast growth in primary issuance in many Asian markets, secondary market trading and liquidity remain sub-optimal and fragmented.

The region's demographic changes, substantial needs for infrastructure and urban development suggest long-term funding needs will only increase. Robust local capital markets are essential to diversify the sources of funding necessary to support long-term investments.

While it should be recognized that there is a long journey ahead, globally not just regionally, to finding an optimal market structure in this new paradigm for bond markets, there are several actions that policy makers in the region could take that would have a positive impact on regional market development and liquidity:

- **Promote the issuance of bonds, supply-side:** A unique feature of many Asian economies is that the demand for LC bonds exceeds supply, especially in the corporate space. Asia's high savings rate has resulted in significant pools of capital that are available to invest. A lack of supply and other market impediments, some listed below, rather than insufficient demand, are the larger obstacles to further LC bond market development.
- **Facilitate investment, demand-side:** Expand the investor base, promoting broad, active domestic and foreign participation. A varied and expanding investor base, with diverse investment objectives, that employ a range of investment strategies, is essential for a deep, liquid and efficient capital market. If ownership is concentrated in a small number of local institutions employing similar investment strategies, the result may be "buy-and-hold" portfolios, which, in effect, reduces the overall liquidity.
- **Monitor their country's inclusion in global bond indices:** Index inclusion and weighting can influence foreign investor interest. Understanding the inclusion criteria and taking them into account when developing policy and government debt management programs are key for local bond market development. As an example, focusing on large-size benchmark issues will likely lead to higher overall weights in global indices.
- **Enhance primary and secondary market architecture:** Market infrastructure is critical in facilitating trading. Most countries covered in this report have invested in market structure in a bid to boost bond market liquidity. While investment and reform efforts should continue to refine and upgrade supporting market structure, more targeted efforts are needed to address cross-border barriers to regional integration.
- **Set harmonized standards on post trade reporting to enhance transparency and liquidity:** Consolidated trading information is not available in the way TRACE makes it available for bond trades in the US and MiFID proposes to do for European bonds. The region could foster development of Asian bond markets through the establishment of a regional post-trade transparency regime with harmonized disclosure requirements. Such a regime would require coordination and standardization of regulatory practice.
- **Develop risk management tools:** The lack of appropriate risk management products, such as efficient shorting and hedging tools (for FX, rates and credit), hinders investment appetite and decreases secondary market trading, and liquidity. Risk management or hedging costs of running market making activities can impact underlying bid-ask spreads.
- **Increase the size of benchmark bonds and build the existing yield curve:** Without benchmark government bonds, with reliable issuance schedules, market structure cannot evolve with predictable and reliable patterns. Secondary market liquidity is hindered and corporate bond issuance is harder to price if markets lack true benchmark nodes.
- **Strengthen current credit rating system:** Credit rating agencies play a key role in financial markets by helping to reduce the information asymmetry between investors and issuers about the creditworthiness of companies or countries. The region needs to do more work to improve and standardize credit rating systems.
- **Diversity of bond issuance: T**he region would be well served by taking measures to encourage a wider range of credit quality outstanding in their jurisdictions' corporate bond markets.
- **Promote development of a well-regulated securitization market:** As a tool to diversify and disperse risks, securitization has played a vital role in developed markets for an extended period of time. As the range of securitized products and markets has grown in terms of variety and sophistication, a wider range of investors and market participants have recognized the potential for securitization to meet the twin objectives of enhanced return and portfolio diversification. Given the success that securitization has enjoyed globally, there are benefits for effective use of this tool across Asia.
- **Facilitate ETF market development:** For bond investors, ETFs offer a new, all-to-all technology to buy and sell a basket of bonds like a stock. The investor trades directly with other investors, retail and institutional, on the same terms, on an equity exchange, at a public price. This is a transformational concept for bond markets. A market traditionally dependent on bank intermediation can find a supplementary way to trade through ETFs. ETFs are helping to transform what was an opaque, over-the-counter, and principal-driven market into a standardized and agency-driven market.

The Asian bond market plays a central role in financing regional growth whilst creating investment opportunities for end investors regionally and globally. We believe there is scope for improving the regional bond markets further, both in terms of primary issuance and secondary trading. These reforms would hasten the evolution from today's market structure to a modernized, "fit for purpose" Asian bond market.

Endnotes

1. To list a few examples. Indonesia: Out of 237 banks, 65 were eventually closed, 13 were nationalized, 7 private banks were recapitalized and the 7 state banks had to be merged into four. Korea: As more corporate and bank failures occurred, including those of the larger Chaebols (large family-owned business conglomerate), the government had to take a majority stake in Korea First Bank and Seoul Bank. Hong Kong: Failure of the local investment bank Peregrine Investment Holdings. Thailand: The central bank suspended 64 finance companies and announced plans for a complete revamp of the financial sector as part of the IMF programme. Malaysia: In July 1998, the government announced a plan for the consolidation of the financial industry covering 58 financial institutions. "Asian Financial Crisis : Causes and Development" Hong Kong Institute of Economics and Business Strategy The University of Hong Kong, 2000 http://wangyujian.hku.hk/papers/monographs/04_Asian_Financial_Crisis(English).pdf
2. Due to the collapse of Daewoo Group in 2000 and accounting scandal involving SK Group in 2003.
3. "Developing the corporate bond market: the Korean experience" BIS Papers No 26 http://www.bis.org/publ/bppdf/bispap26o.pdf
4. "Capital Markets Union: Integration of Capital Markets in the European Union" PWC, 2015 https://www.pwc.com/gx/en/banking-capital-markets/pdf/cmu-report-sept-2015.pdf

5&6. "Developing Local Currency Bond Markets in Asia" ADB Economics Working Paper Series No. 495, Q2 2016 https://www.adb.org/sites/default/files/publication/190289/ewp-495.pdf

7. "Broadening the Investor Base for Local Currency Bonds in Asean +2 Countries" ADB, 2013 https://www.adb.org/sites/default/files/publication/30255/broadening-investor-base.pdf
8. Indonesia: Baa3 by Moody's, BB+ by S&P (sub-investment grade), BBB- by Fitch. Malaysia: A3 by Moody's, A by S&P, A- by Fitch. Bloomberg as of Q3 2016
9. For example the average 10 year LC government bonds yield for the region is at 3.7%, Indonesia's yield is at 7.9% and Malaysia's yield is at 4.3%. Source: AsianBondsOnline as of Q3 2016 https://asianbondsonline.adb.org/
10. Hong Kong's turnover ratio for government bonds in 2005 stands out at 15.2, much higher than any other country in the region, due to artificially high trading volume reported. The trading volume for Hong Kong local currency government bond market dropped significantly in 2012 after The Hong Kong Monetary Authority (HKMA) issued the circular to address round-tripping trades. Prior to 2012, to be a market maker or primary dealer for the Exchange Fund Notes or government bond market, the participating dealers were assessed by quantitative and qualitative criteria including turnover, leading to some using 'round-tripping' trades to inflate trading volumes reported. The HKMA stated in the circular that trades involving this kind of practice would be excluded for the purpose of evaluating an institution's turnover. Hong Kong Monetary Authority, 2011 http://www.hkma.gov.hk/media/eng/doc/key-information/guidelines-and-circular/2011/20111216e1.pdf
11. "Non-Financial Corporate Bond Financing in Foreign Currency: Trends and Risks in ASEAN+3 Emerging Economies" AMRO Thematic Study No. 03/2016 www.amro-asia.org/services/download_file.aspx?f=%7B224909E6-7AC1-4CC0
12. See Munro and Wooldridge (2009) for a discussion on the motivations for swap-covered foreign currency borrowing and the mechanics of this approach. "Internationalisation of Asia-Pacific bond markets" BIS, August 2009 http://www.bis.org/repofficepubl/arpresearch200906.6.pdf
13. "ETFs Take Root in Asian Institutional Portfolios" Greenwich, Q1 2016 https://www.greenwich.com/press-release/etfs-take-root-asian-institutional-portfolios

Definitions

ABF	Asian Bond Fund
ABMF	Asian Bond Market Forum
ABMI	Asian Bond Markets Initiative
ADB	Asian Development Bank
AMBIF	ASEAN+3 Multi-Currency Bond Issuance Framework
AMRO	ASEAN+3 Macroeconomic Research Office
APEC	Asia-Pacific Economic Cooperation
ASEAN	Association of Southeast Asian Nations
Bid-ask spread	The difference between the purchase and sale price of a bond
CBRC	The China Banking Regulatory Commission
CIBM	China Interbank Bond Market
CIRC	China Insurance Regulatory Commission
CSDCC	The China Securities Depository and Clearing Co.
CSIF	Cross-Border Settlement Infrastructure Forum
CSRC	The China Securities Regulatory Commission
EMEAP	Executives' Meeting of East Asia and the Pacific
FPI	Foreign Portfolio Investor
GB Programme	The Government Bond Programme
HKMA	Hong Kong Monetary Authority
KTBs	Korean Treasury Bonds
MOF	Ministry of Finance
NDRC	The National Development and Reform Commission
OTC	Over-the-counter
PBoC	People's Bank of China
RQFII	RMB Qualified Foreign Institutional Investor
SAFE	State Administration of Foreign Exchange

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