Development of Asian Local Currency Bond Markets and Remaining Challenges

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I. Asia's expanding local currency bond markets

Outstanding issuance of local currency bonds in Asian countries excluding Japan totaled ¥7,943.0 billion as of end-June 2014, representing a 6.8-fold increase since December 2012, just before the Asian Bond Markets Initiative (ABMI) was launched under the framework of the ASEAN+3 Finance Ministers and Central Bank Governors' Meeting[2] (Figure 1).

The key drivers of the significant growth in the Asian local currency bond markets have been China and South Korea. However, all of the ASEAN countries—Malaysia, Thailand, Singapore, Indonesia, the Philippines and Vietnam—have also contributed to this growth, with their combined outstanding issuance of local currency bonds increasing from ¥270 billion at end-2002 to ¥1,121 billion as of end-June 2014 (Figure 2). Outstanding government bonds and corporate bonds (including bank debenture bonds) have increased at about the same rate, accounting for 60% and 40% of total outstanding bonds respectively as of end-June 2014.

In addition, from end-2002 through end-June 2014, the ratios of outstanding local currency bonds to GDPs were up across the board with the exception of Indonesia (Figure 3). During this period, the Asian bond markets grew at a faster pace than the economies in the region.

This continued strong growth has been fueled by the overall increase in funding demand that has accompanied economic growth in the region. However, growth exceeding the pace of economic development indicates that some other factors have also stimulated demand for bond issues. For one, the improvement of economic fundamentals in the Asian countries has led to higher sovereign credit ratings for those countries. Another likely reason is increased demand from foreign investors trying to realize profits from high yields and currency appreciation by investing in local currency bonds.

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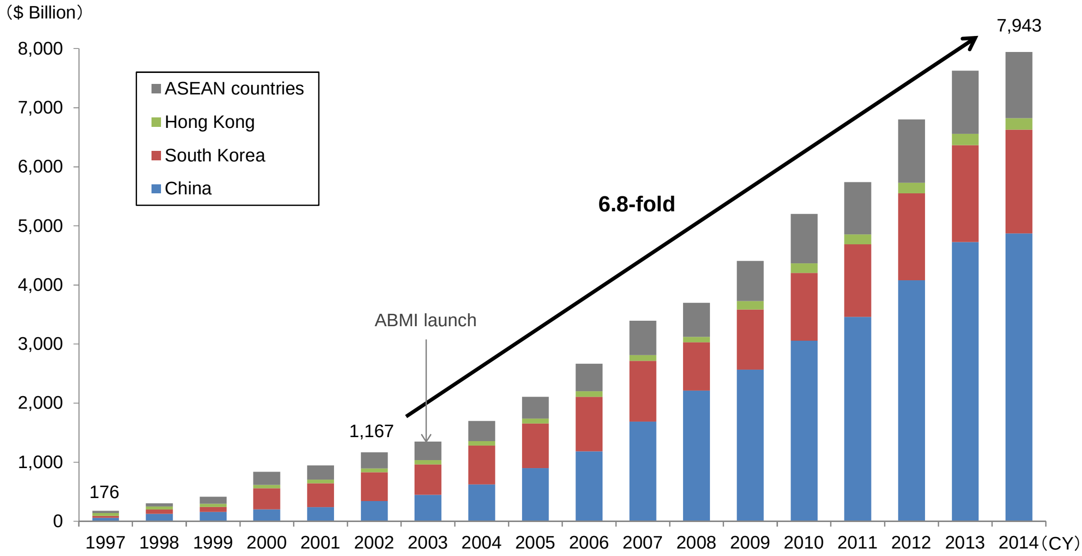
1 In this report, Asian countries refer to China, South Korea, Hong Kong, Malaysia, Thailand, Singapore, Indonesia, the Philippines, and Vietnam, unless stated otherwise.

2 Discussions on the proposal to create the ABMI began in December 2002, and the proposal was approved at the ASEAN+3 Finance Ministers' Meeting in August 2003.

Figure 1: Outstanding issuance of Asian local currency bonds



Note: Figures are as of year-end, except for 2014, for which figures are as of end-June.
Source: Nomura Institute of Capital Markets Research, based on ADB's Asian Bonds Online website

Figure 2: Breakdown of outstanding Asian local currency bonds sorted by government bonds and corporate bonds

($Billion, %)

	As of end-2002					As of end-June 2014				
		Government bonds		Corporate bonds			Government bonds		Corporate bonds	
		Value	Share	Value	Share		Value	Share	Value	Share
China	**342**	334	97%	9	3%	**4,872**	3,164	65%	1,708	35%
South Korea	**486**	163	34%	323	66%	**1,759**	692	39%	1,066	61%
Hong Kong	**68**	15	22%	53	78%	**192**	109	57%	83	43%
Malaysia	**79**	44	56%	34	44%	**328**	191	58%	138	42%
Thailand	**47**	40	86%	7	14%	**283**	216	76%	67	24%
Singapore	**61**	33	55%	28	45%	**247**	152	62%	95	38%
Indonesia	**56**	53	96%	2	4%	**123**	105	85%	18	15%
the Philippines	**27**	27	100%	0	0%	**103**	87	85%	15	15%
Vietnam	**0**	0	100%	0	0%	**37**	36	98%	1	2%
Total	**1,167**	711	61%	456	39%	**7,943**	4,752	60%	3,191	40%
(Change)	-	-	-	-	-	*6.8-fold*	*6.7-fold*	-	*7.0-fold*	-

Source: Nomura Institute of Capital Markets Research, based on ADB's Asian Bonds Online website

Figure 3: Outstanding Asian local currency bonds as a percentage of GDP

(%)

	As of end-2002			As of end-September 2014		
		Government bonds	Corporate bonds		Government bonds	Corporate bonds
China	23.5	22.9	0.6	51.2	33.3	18.0
South Korea	75.7	25.4	50.3	122.1	48.1	74.0
Hong Kong	40.9	9.1	31.9	68.3	38.7	29.6
Malaysia	78.2	44.0	34.2	101.8	59.1	42.7
Thailand	37.1	32.0	5.1	76.3	58.3	18.0
Singapore	64.4	35.3	29.2	81.1	50.0	31.1
Indonesia	27.4	26.2	1.2	15.3	13.0	2.3
the Philippines	37.1	36.9	0.1	37.3	31.7	5.6
Vietnam	0.8	0.8	0.0	21.1	20.8	0.3

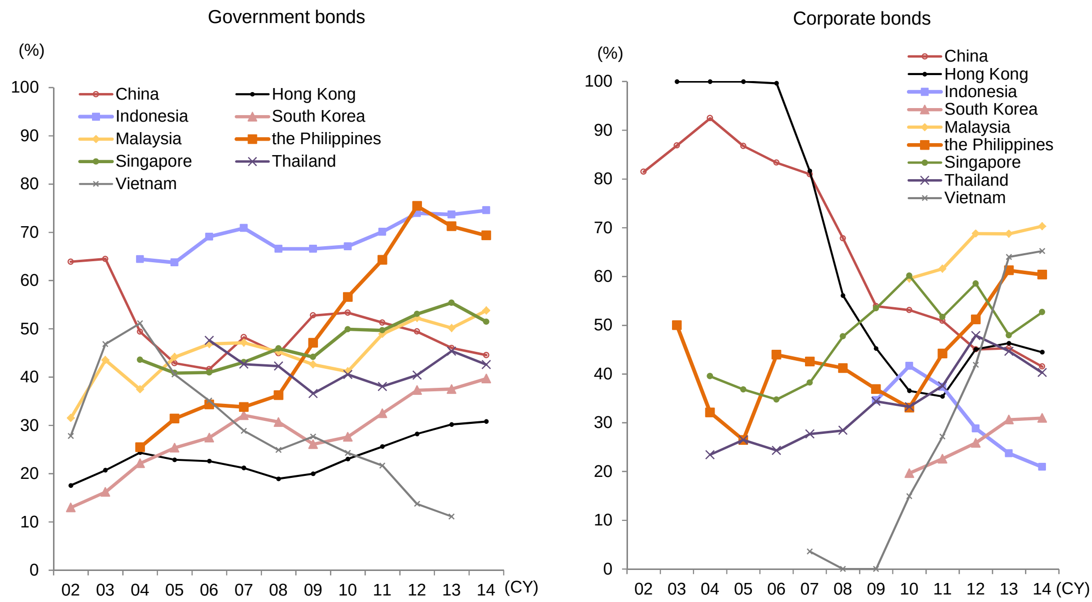
Source: Nomura Institute of Capital Markets Research, based on ADB's Asian Bonds Online website

Figure 4: Changes in long term foreign currency–denominated sovereign ratings of Asian countries

	As of end-2002			As of end September 2014		
	S&P	Moody's	Fitch	S&P	Moody's	Fitch
China	BBB	A3	A-	AA-	Aa3	A+
South Korea	A-	A3	A	A+	Aa3	AA-
Hong Kong	A+	A3	AA-	AAA	Aa1	AA+
Malaysia	BBB+	Baa1	BBB+	A-	A3	A-
Thailand	BBB-	Baa3	BBB-	BBB+	Baa1	BBB+
Singapore	AAA	Aaa	AA+	AAA	Aaa	AAA
Indonesia	CCC+	B3	B	BB+	Baa3	BBB-
the Philippines	BB+	Ba1	BB+	BBB	Baa3	BBB-
Vietnam	BB-	B1	BB-	BB-	B1	B+

Source: Nomura Institute of Capital Markets Research, based on data of credit rating agencies and Bloomberg

Figure 5: Ratios of outstanding local currency bonds with maturities of more than five years



Note: 1. Figures are as of year-end, except for 2014, for which figures are as of end-June.
2. Data on Vietnam's government bonds for 2014 is not available.

Source: Nomura Institute of Capital Markets Research, based on ADB's Asian Bonds Online website

In addition to the increase in outstanding issuance of local currency bonds, their maturities have become longer. Figure 5 shows the trend in ratios of outstanding local currency bonds with maturities of longer than five years since 2002. The maturities of the bonds were adjusted to appropriate levels after sharp declines in the two countries where the ratios of outstanding bonds with maturities of more than five years were high for the initial period of time. The longer maturity term structure has enabled sovereign and corporate issuers in the region to raise capital via bonds in a stable manner.

It should be noted that the ABMI's efforts to establish market infrastructure and systems have played an important role in developing Asian bond markets, including the increase in outstanding issuance and the longer maturity term structure. The following sections will cover the ABMI's key activities and results to date, followed by major challenges.

II. ABMI: Main initiatives and results to date

1. ABMI based on lessons learned from the Asian currency crisis

Prior to the Asian currency crisis of 1997, Asian countries were heavily dependent on short-term loans denominated in foreign currencies, mainly the US dollar, while their investments were primarily long-term and denominated in local currencies, resulting in double mismatches in currency and duration. Under such circumstances, the depreciation of the Thai baht triggered a massive exodus of foreign funds from Asian countries that led to the currency crisis. The crisis was compounded by a structural weakness in the region's financial system—namely, an excessive dependency on banks. Consequently, the region was also hit by a banking crisis at the same time.

The lesson learned from this dual crisis was the importance of meeting demand for financing long-term local currency funds with long-term local currency bonds. The Japanese government therefore proposed creating the ABMI in December 2002 with the aim of developing efficient and liquid bond markets in the region, which would enable better utilization of regional savings for intraregional investments. The proposal on the ABMI was then endorsed at the 6th ASEAN+3 Finance Ministers Meeting held in August 2003.

2. ABMI: Main efforts in the first five years and results

1) Establishment of working groups and development of ABMI Roadmap

When the ABMI was launched in 2003, the following six working groups were established along with focal groups to coordinate work between the working groups.

i. Working group to create new securitized debt instruments

ii. Working group focused on credit guarantee mechanisms

iii. Working group to deal with foreign exchange transactions and settlement issues

iv. Working group focused on issuance of bonds denominated in local currency by Multilateral Development Banks (MDBs), foreign government agencies, and Asian multinational corporations

v. Working group focused on local and regional rating agencies

vi. Working group for technical assistance coordination

Based on the discussions and findings of these working groups, the ABMI Roadmap was announced in 2005. The six working groups were reorganized into four working groups and two teams through dissolution of the No. 4 working group, inclusion of the No. 6 group into the newly created Technical Assistance Coordination Team (TACT), and establishment of the Ad-hoc Support Team for the Focal Group.

2) Progress in diversifying issuers and types of products

The key result in ABMI's first five years was progress in diversifying the issuers and the types of bonds denominated in local currencies.

Specific achievements include (i) the issuance of international collateralized bond obligations (CBOs) with the cooperation of the Japanese and South Korean governments, (ii) bond issues by local subsidiaries of Japanese companies in Thailand, Malaysia, and Indonesia, with credit enhancement from the Japan Bank for International Cooperation (JBIC) and Nippon Export and Investment Insurance (NEXI), (iii) local currency bond issues in Malaysia, Thailand, China, and the Philippines by JBIC, the World Bank, the Asian Development Bank (ADB), and the International Finance Corporation (IFC)[3].

A website called Asian Bonds Online (ABO) was established in 2004 with the support of the ADB to improve market transparency and facilitate the decision-making process for issuers and investors. ABO provides a wide variety of information and data on Asian bond markets as well as ABMI's activities to the general public. Asian Bond Monitor which encapsulates recent developments in the region's bond markets is also published quarterly by the ADB on the ABO website. In addition, training programs were provided to improve global investors' confidence in Asian regional rating agencies and enhance comparability among the credit ratings of Asian countries, followed by the publication of "The Handbook on International Best Practices in Credit Rating"[4] by the ADB in December 2008.

3. Major initiatives undertaken since 2008 and results

1) ABMI New Roadmap

Five years after the ABMI's launch, a New ABMI Roadmap targeting further development of Asian local currency bond markets was prepared and endorsed at the 11th ASEAN+3 Finance Ministers' Meeting held in Madrid in May 2008. To implement the new roadmap, four task forces were created to deal with the following four issues. In addition, the TACT's mission was extended and a new steering group to coordinate the work of the task forces was established.

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[3] http://www.mof.go.jp/international_policy/financial_cooperation_in_asia/abmi/

[4] http://www.adb.org/sites/default/files/pub/2008/OREI_Handbook_on_International_Best_Practices_WEB.pdf

i. Promote the issuance of local currency bonds (TF1: Task Force 1)

ii. Facilitate demand for local currency bonds (TF2: Task Force 2)

iii. Improve the regulatory framework (TF3: Task Force 3)

iv. Improve the related infrastructure for the bond markets (TF4: Task Force 4)

In 2012, the ABMI's tenth year, an ABMI New Roadmap Plus was developed and endorsed at the 15th ASEAN+3 Finance Ministers and Central Bank Governors' Meeting held in Manila in May 2012. Targeting greater priority of issues to be tackled and adoption of a phased approach, the New Roadmap Plus identifies nine priorities based on three directions (Figure 6).

Figure 6: Overview of ABMI New Roadmap Plus

Direction 1: Follow-up issues that need to be addressed to produce tangible outcomes

(1) Launching CGIF guarantee programs (TF1)
(2) Developing infrastructure-financing schemes (including Lao-Thai pilot project) (TF1)
(3) Fostering an investment-friendly environment for institutional investors & transmitting the ABMI's knowledge to institutional investors (TF2)
(4) Enhancing ABMF activities (including Common Bond Issuance Program) (TF3)
(5) Facilitating the establishment of the regional settlement intermediary (RSI) (TF4)

Direction 2: Additional issues to be addressed to strengthen the momentum for the ABMI discussion

(1) Further developing the government bond markets (TF2)
(2) Enhancing financial access to consumers and SMEs (TF3)
(3) Strengthening the foundation for a regional credit rating system (TF4)

Direction 3: New issues to be raised to meet the demands of a changing global financial market

(1) Raising financial awareness (TF4)

Source: Joint Statement of the 15th ASEAN+3 Finance Ministers and Central Bank Governors' Meeting, Annex 2

2) Progress since adoption of the New Roadmap

(1) Establishment of the CGIF and initiation of guarantee programs

In 2010, the Credit Guarantee and Investment Facility (CGIF) was established with the aim of supporting the issuance of corporate bonds in the ASEAN+3 region by providing credit enhancement so that eligible issuers can access local currency bond markets. The CGIF was initially capitalized at $700 million, of which $200 million was provided by Japan and China respectively, $130 million by the ADB, $100 million by South Korea and $70 million by the ASEAN countries. The CGIF adopted a policy of diversifying its exposures to countries, currencies and industries to avoid portfolio concentration risk, and established an upper limit of $140 million in guarantees to any one country.

Figure 7: CGIF's Guarantee Portfolio

		Guarantee No. 1	Guarantee No. 2		Guarantee No. 3
Issuer Information	Name	Noble Group Limited	PT BCA Finance		Kolao Holdings
	Country	Hong Kong (listed on Singapore Exchange)	Indonesia		Laos (listed on the Korea Exchange)
	Business	Trading company (agriculture products, energy, and metals)	Automobile financing		Automobile & motorcycle sales
	Credit rating	BBB-(S&P)、Baa3(Moody's)、BBB-(Fitch)	AAA idn(Fitch)		n/a
Issue information	Issue amount	THB2.85 billion (about USD100mn)	IDR300 billion (about USD26mn)	IDR120 billion (about USD10mn)	SGD60 million (about USD48mn)
	Issue date	26 April 2013	4 December 2013	18 March 2014	21 August 2014
	Maturity	3 years	3 years	3 years	3 years
	Coupon	3.55%	8.20%	7.95%	2.00%
	Investor composition	Regional: domestic 78%, foreign 22% Investor class: asset managers 46%, pensions 31%, insurance companies 23%	The Dai-ichi Life Insurance Company 100%	Foreign insurance company 100%	Regional: domestic 77.5%, foreign 22.5% Investor class: asset managers 100%

Source: Nomura Institute of Capital Markets Research, based on CGIF's presentation materials and The Dai-ichi Life Insurance Company's press release

The CGIF's latest portfolio as of mid-November 2014 is summarized in Figure 7. It should be noted that insurance companies are the second largest investors in CGIF-guaranteed bonds, following asset management firms. Many insurance companies are showing an interest in bonds denominated in Asian currencies as part of a strategic focus on Asia as an area likely to continue posting high economic growth rates. However, currency risk and issuer risk are two major obstacles to investors considering investing in Asian bonds. Meanwhile, many local companies have not received credit ratings and even if they were to get a rating from a domestic rating agency that rating might not be usable by investors. Investing in CGIF-guaranteed bonds is a useful way for investors to avoid issuers' credit risks when investing in Asian bonds, as the credit of the issuers guaranteed by the CGIF becomes equivalent to that of the CGIF regardless of their original ratings[5].

While the CGIF has only guaranteed a total of four issues by three issuers during almost four years since its establishment, the number of candidate deals appears to be steadily increasing. Given this backdrop, the guarantee capacity was raised from $700 million to $1.75 billion in November 2013. The key point now is to raise investors' awareness of CGIF-guaranteed bonds, as bond issuance will not take place without investors no matter how much demand from issuers increases. Private-sector financial institutions, especially securities companies, could play a leading role in resolving this issue.

If the issuance of CGIF-guaranteed bonds increases as a result of further enhancement of investors' awareness, the CGIF may need to increase its capital to strengthen its own financial base. In addition, while the CGIF's operation is currently limited to the guarantee of bonds, it is hoped that its role will be expanded in the medium- to long-term to include investments for the development of Asian bond

5 CGIF has received a credit rating of AA from Standard & Poor's.

markets, given that such a business expansion is allowed by the Articles of Agreement[6].

(2) ASEAN+3 Bond Market Forum

Another ABMI activity was the establishment of the ASEAN+3 Bond Market Forum (ABMF) in September 2010 as a common platform to foster standardization of market practices and harmonization of regulations across the ASEAN+3 bond markets in order to promote cross-border bond transactions[7]. ABMF participants include authorities (finance ministry, central bank, etc.) from each of the ASEAN+3 countries and market specialists in the private sector. The ABMF has met 16 times to date.

The ABMF consists of two sub-forums. Sub-forum 1 (SF1) is focused on harmonization of regulations and standardization of market practices. Sub-forum 2 (SF2) is discussing the issue of harmonizing and standardizing bond transaction settlement procedures. In April 2012, the ABMF released a 1,500-plus page report, "the ASEAN+3 Bond Market Guide"[8] covering a wide variety of topics, including details on market practices. SF1 is presently considering the introduction of the ASEAN+3 Multi-currency Bond Issuance Framework (AMBIF) for professional investors, referencing Japan's bond market for professional investors, the TOKYO PRO-BOND Market operated by the Tokyo Stock Exchange. Meanwhile, SF2 is proceeding with discussions on the formation of a standard bond settlement model.

AMBIF is being discussed not only under the framework of the ASEAN+3 regional financial cooperation but also as bilateral financial cooperation between Japan and ASEAN countries. According to a fact sheet[9] released by Japan's Ministry of Finance in May 2014, comparisons of the bond issuance documentation and procedures have been conducted between Japan and Malaysia, Singapore and Thailand respectively. Under the current situation where bond issuance under the AMBIF has not yet begun, it is important for a first deal that issuers and investors be made more aware of the AMBIF concept. It is therefore hoped that private-sector financial institutions, especially securities companies, will step up their marketing and other activities to promote the AMBIF. CGIF guarantees might also help promote AMBIF bond issuance.

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6 http://www.cgif-abmi.org/datas/pdf/CGIF_Articles_of_Agreement.pdf

7 This overview of the ABMF is based on Okamura Kenji [eds.] *Zusetsu Kokusai Kinyu 2013–2014 Edition* (Illustrated International Finance 2013-2014 Edition) (Japanese only), Zaikei Shoho-sha, published in 2013.

8 http://asianbondsonline.adb.org/publications/adb/2012/asean+3_bond_market_guide.pdf

9 "Bilateral Financial Cooperation between Japan and the ASEAN Countries", Japan Ministry of Finance, 3 May 2014.

III. ASEAN countries' efforts to develop their own bond markets

While the ABMI is a multilateral framework for regional financial cooperation among the ASEAN+3 countries, each of the ASEAN countries is also making its own efforts to develop their financial and capital markets. The main initiatives are presented below.

Malaysia released its Financial Sector Blueprint 2011–2020 in December 2011[10]. The blueprint indicates two main strategies for developing its bond market: (i) an emphasis on developing robust financial markets (i.e., increase of liquidity in the foreign currency, bond, and short-term financial markets) and (ii) internationalization of Islamic finance, including Sukuk (Islamic bonds)[11]. The blueprint presents the following specific objectives over the 10 years from 2011 to 2020: (i) increasing the size of the domestic financial market (sum of loans outstanding, stock market capitalization and bonds outstanding) by 8–11% annually and to six times of GDP from 4.3 times in 2010, (ii) expanding the share of funds raised through the financial markets to 52% of total financing from 46% in 2010, (iii) raising the share of Islamic finance to 40% of total financing in 2020 from 29% in 2010.

Indonesia meanwhile announced its Capital Market and Non-Bank Financial Industry Master Plan 2010-2014[12] in October 2010. The plan indicates the direction of Indonesia's financial market, such as increase of liquidity in the bond market, including for Sukuk, and development of a supervisory mechanism. Specific measures include (i) development of the repurchase agreement market, (ii) strengthening of bond market supervision, (iii) improvement of bond-trading infrastructure, and (iv) establishment of a benchmark for determining reliable fair-market values.

Thailand released its Capital Market Development Master plan[13] in November 2009, with an implementation timeframe of five years (2010–2014). A key goal of Thailand's plan was to make the country's capital market more easily accessible for investors. Bond market–related initiatives included development of (i) the domestic bond market to facilitate the issuance of Thai government bonds and (ii) new financial products, including inflation-linked government bonds and Sukuk, that would contribute to market development.

Vietnam unveiled its plans for capital market development through 2020 back in August 2007[14]. The plan targets expanding the country's capital market to a size comparable with the markets in other countries in the region and boosting Vietnam's

10 http://www.bnm.gov.my/files/publication/fsbp/en/BNM_FSBP_FULL_en.pdf
11 For more information on Malaysia's financial markets, see Lackmann, Bedi Gunter, "The Six Key Countries Driving Global Islamic Finance Growth", Nomura Journal of Capital Markets, Autumn 2014.
12 http://www.bapepam.go.id/pasar_modal/publikasi_pm/info_pm/masterplan_bapepamlk_2010-2014_eng.pdf
13 http://www.sec.or.th/TH/AboutUs/Documents/executive_summary_041109_eng.pdf
14 The Government of the Socialist Republic of Vietnam, "Decision on Approval of the Project for Development of Vietnam's Capital Markets up to 2010 and Outlook to 2020", 2 August 2007

securities market scale to 70% of the nation's GDP. Bond market–related measures have included increase of the issuance of national and local government bonds as well as corporate bonds and diversification of the types of bond products. Vietnam has also focused on expansion of transactions using convertible corporate bonds and construction bonds crucial to the funding for national infrastructure projects.

Neither Singapore nor the Philippines has produced a master plan for market development, but both consider development of their national bond markets as an important issue and are endeavoring to improve their respective markets[15]. Singapore has been working to (i) lengthen the maturities of the benchmark yield curves, (ii) attract a more diverse group of investors, (iii) expand the pool of issuers, and (iv) develop a more liquid market. Meanwhile, the Philippines has been striving to (i) improve liquidity, (ii) expand transactions in private-placement bonds, securitized bonds, and ETFs, (iii) prepare systems needed for operating a derivatives market, (iv) strengthen clearing and settlement functions for securities and currency trades, and (v) contribute to regional financial cooperation.

Although the specific goals and timeframes of the ASEAN countries' efforts to develop their financial and capital markets vary with the different levels of market maturation when the efforts were launched, it is clear that all the ASEAN countries recognize the importance of developing their bond markets. Going forward, the ASEAN countries should be able to realize further growth of their own markets and development of bond markets throughout the region, as long as they share with one another not only the direction and contents of their efforts but also specific examples of their successes and failures.

IV. Issues facing Asian bond markets and new efforts under the ABMI

1. Insufficient liquidity

Outstanding issuance of local currency bonds on Asian markets has increased continuously thanks to the ABMI's focus on the development of market infrastructure and systems for bond issuance. However, efforts to develop the secondary market have taken a back seat to the efforts to develop the issuance market. Trading turnover ratios and bid-ask spreads as representative measures of liquidity help us grasp the degree to which the secondary markets for Asian local currency bonds have been developed.

Figure 8 shows the turnover ratios for government and corporate bonds in each market. The turnover ratios for government bonds are lower than those of for corporate bonds in all countries except China. The data for 2004–2013 reveals some differences in the degree of fluctuation for government bonds and corporate bonds as well as slights variations from country to country. Overall, however, it would be

15 Asian Development Bank, "ASEAN+3 Bond Market Guide", April 2012

difficult to say that turnover ratios have been improving. It should also be noted that turnover ratios in most countries are lower than those in Japan. Figure 9 shows the bid-ask spreads for government bonds in each market. Although the spreads in most countries have generally narrowed from 2004 to 2013, they remain higher than the 1–2bps spread for Japanese government bonds (JGBs) in all countries except South Korea.

Overall, the differences between turnover ratios and bid-ask spreads in Asian markets and those in Japan indicate that the secondary markets in most of the Asian bond markets remain underdeveloped. Improvement of liquidity is considered as a crucial condition for achieving further growth of Asian bond markets, as market liquidity is an important factor for investors.

Figure 8: Turnover ratios in Asian local currency bond markets

		End-2004	End-2005	End-2006	End-2007	End-2008	End-2009	End-2010	End-2011	End-2012	End-2013	End-2014
China	Gov't bonds	0.2	0.3	0.3	0.4	0.8	0.6	1.0	0.6	0.8	0.2	0.2
	Corporate bonds	0.0	0.7	0.8	0.8	0.9	1.1	1.2	1.2	1.0	0.2	0.2
South Korea	Gov't bonds	1.1	0.7	0.6	0.5	0.6	0.9	1.2	1.1	1.0	0.8	0.9
	Corporate bonds	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.1
Hong Kong	Gov't bonds	8.6	15.4	16.1	22.1	21.8	38.4	49.6	19.0	1.4	1.1	1.7
	Corporate bonds	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	n/a
Malaysia	Gov't bonds	0.3	0.3	0.5	0.5	0.6	0.6	0.6	0.6	0.5	0.4	0.4
	Corporate bonds	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Thailand	Gov't bonds	0.4	0.4	0.5	0.8	1.0	0.7	0.9	0.6	0.7	0.6	0.6
	Corporate bonds	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1
Singapore	Gov't bonds	n/a	0.6	0.6	0.6	1.0	0.5	0.8	0.6	0.4	0.5	0.4
	Corporate bonds	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Indonesia	Gov't bonds	n/a	0.1	0.2	0.3	0.2	0.2	0.3	0.3	0.3	0.3	n/a
	Corporate bonds	n/a	0.0	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	n/a
the Philippines	Gov't bonds	n/a	0.3	0.3	0.4	0.2	0.3	0.7	0.5	0.7	0.5	n/a
	Corporate bonds	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Japan <reference>	Gov't bonds	1.2	1.2	1.6	2.1	1.6	1.3	1.2	1.2	1.1	1.2	1.2
	Corporate bonds	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

Notes: 1. Turnover ratio is obtained by dividing traded volumes by total outstanding bonds. Larger turnover ratios indicate higher liquidity.
2. End-2013 data for the Philippines is actually end-June 2013 data.

Source: Nomura Institute of Capital Markets Research, based on ADB's Asian Bonds Online website

Figure 9: Bid-ask spreads on Asian local currency bond markets

(bps)

	04	06	07	08	09	10	11	12	13
China	32.5	7.6	20.0	15.0	5.1	2.2	4.0	2.7	4.1
South Korea	4.8	1.4	4.5	1.7	1.1	1.1	0.7	0.6	0.7
Hong Kong	3.0	3.0	8.0	4.0	4.3	5.1	4.7	6.4	7.3
Malaysia	3.5	2.3	1.5	12.2	2.3	2.6	3.3	2.7	3.8
Thailand	7.3	3.0	6.3	9.8	3.4	3.1	3.3	3.2	2.4
Singapore	5.5	2.7	3.4	20.0	2.9	3.0	3.8	3.1	2.6
Indonesia	140.8	16.9	42.0	24.5	26.6	31.7	32.9	38.8	50.0
the Philippines	25.0	25.3	10.0	19.8	6.6	3.1	5.3	2.1	5.4
Vietnam	n/a	n/a	20.6	75.0	25.6	13.2	33.5	30.5	21.7

Notes: 1. Bid-ask spreads are the difference between sellers' ask prices and the buyers' bid prices. Lower values indicate higher liquidity.
2. Data for 2005 is not available.

Source: Nomura Institute of Capital Markets Research, based on ADB's Asian Bonds Online website

2. Diversification of the investor base

1) Essential to the improvement of market liquidity

In September–October 2013, the ADB carried out a survey to determine what measures should be taken to increase liquidity in Asian bond markets. The survey asked market participants in Asian countries[16] to rank the importance of the following eight items for boosting liquidity in the bond markets: (i) greater diversity of the investor profile, (ii) improved market access for investors, (iii) relaxation of regulations on foreign exchange transactions, (iv) easier access to funding in the short-term money markets, (v) introduction of preferential tax treatment that reduces withholding taxes on local currency bonds, (vi) establishment of settlement and custody infrastructure to facilitate bond transactions, (vii) development of the derivatives market as a risk-hedging mechanism, and (viii) increased transparency on bond prices, regulations, etc. The replies to the survey revealed that market participants consider "greater diversity of the investor profile" to be the most important factor for enhancing liquidity in both the government and corporate bond markets.

Figure 10: Results of survey on initiatives needed to raise market liquidity

Rank	Initiative	Score	
		Government bonds	Corporate bonds
1	Greater diversity of investor profile	3.4	3.6
2	Development of risk-hedging mechanisms	3.3	3.0
3	Easier access to transaction funding	3.2	3.0
4	Relaxed regulations on forex transactions	3.1	2.9
4	Increased transparency	3.1	2.9
6	Establishment of settlement and custody infrastructure	2.8	2.9
7	Improve market access	2.7	2.6
8	Introduction of preferential tax treatment	2.5	2.5

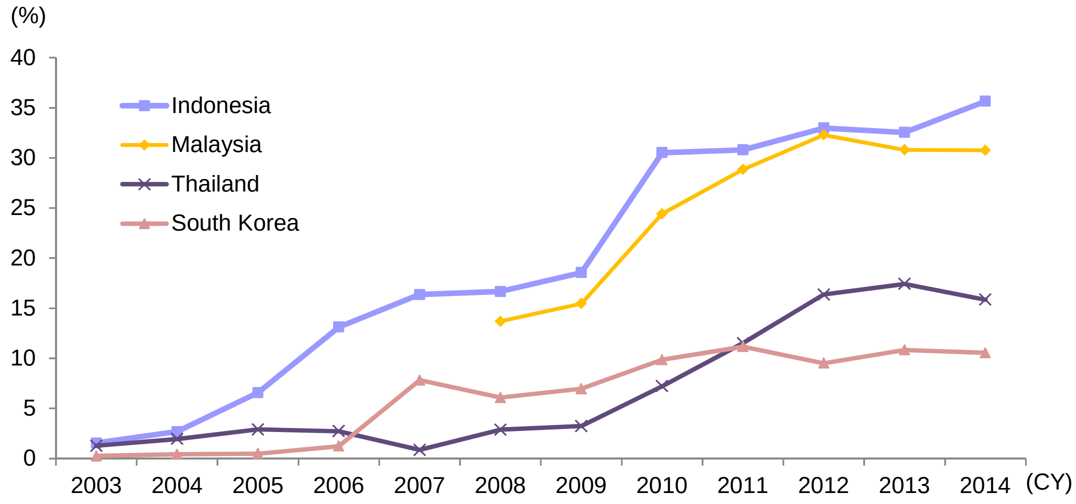
Note: Scores are the average of responses received based on following scoring system: 1 (not important), 2 (somewhat important), 3 (important), 4 (very important).
Source: Nomura Institute of Capital Markets Research, based on ADB's Asian Bonds Online website

2) Dependence on foreign investors

Foreign investors' holding ratios of Asian local currency bond markets have been rising (Figure 11). Indeed, greater participation by foreign investors is important to the diversification of the investor base. However, the flip side of this coin is that foreign investors' holding ratios of Asian local currency bond markets increase those markets' exposure to global market factors.

[16] Asian countries referred here include China, Korea, Hong Kong, Malaysia, Thailand, Singapore, Indonesia, the Philippines, Vietnam, and India.

Figure 11: Foreign investors' share of Asian local currency bond markets



Notes: 1. Year-end figures, except for 2014, which shows end-June figures for Thailand, South Korea and Indonesia and the end-March figure for Malaysia.
2. Foreign investors' share is the percentage of outstanding bonds held by foreign investors.

Source: Nomura Institute of Capital Markets Research, based on ADB's Asian Bonds Online website

According to IMF reports[17], the integration of emerging markets and global markets has led to greater correlation between the two. For example, in the 12 weeks following the US Fed's indication in May 2013 that it would begin to taper its quantitative-easing program, assets under management of emerging market bond funds, including Asian local currency bonds, shrank by 8%. The IMF reports also present data that shows bonds are more easily impacted by changes in the global market environment than are equities.

As previously noted, the ABMI is based on the lesson learned from the Asian currency crisis and was initiated with the purpose of channeling savings to investments in bonds within the region. Attracting investments from a diverse group of foreign investors will not achieve this goal. Rather, Asian bond markets must appeal to a wider group of domestic and intraregional investors.

3) Measures to broaden the domestic/intraregional investor base

One way to broaden domestic and intraregional investor base in Asian local currency bond markets is to develop products that will boost demand from investors, including individuals. At the 16th ASEAN+3 Finance Ministers and Central Bank Governors' Meeting held in Delhi, India, in May 2013, the attending representatives decided to discuss the types of new products that would be needed going forward,

[17] International Monetary Fund, "Global Financial Stability Report", October 2013 & April 2014

referring to the Asian Bond Funds (ABF) launched by the Executives' Meeting of East Asia Pacific Central Banks (EMEAP)[18].

The ABF project was started in 2003 with the purpose of nurturing the development of Asia's bond markets from the perspective of investors. The project led to the development of investment trust products invested in bonds issued by the sovereign governments and government agencies of Asian nations. These products were then bought by the central banks of the EMEAP members. The ABF project originally had two main goals: (i) to raise investors' awareness of Asian bonds and (ii) to promote market and system reforms[19].

The ABF consists of two types of funds—ABF1 and ABF2. ABF1, launched in 2003, invests only in USD–denominated bonds and is open only to EMEAP members. ABF2, launched in 2005, invests in local currency bonds and is open to private-sector investors as well. ABF2 comprises (i) eight country sub-funds invested in local currency government bonds of EMEAP member countries except the three members with well-developed government bond markets, i.e. Japan, Australia and New Zealand, and (ii) the ABF Pan-Asia Bond Index Fund (PAIF), which invests in local currency bonds of the same eight countries (Figure 12, left side). ABF1 is managed by the Bank for International Settlements (BIS) while a private-sector asset management company has been appointed the fund manager for ABF2. The PAIF is an ETF listed on both the Hong Kong Stock Exchange and the Tokyo Stock Exchange since 2005 and 2009 respectively. The PAIF uses an index which references market capitalization, market liquidity, sovereign credit ratings, and market openness. The latest PAIF portfolio composition is as shown in the pie graph in Figure 12.

Upon the launch of ABF2 in 2005, the central banks of the EMEAP members invested a total of $1 billion in the eight single-market funds and another $1 billion in the PAIF. The combined asset value of the nine sub-funds has risen to above $5 billion, indicating that ABF2 has succeeded in stimulating investment in local currency bonds by private-sector investors. The introduction of the ABF has produced some significant results, including the relaxation or elimination of foreign exchange regulations and withholding taxes by participating countries and the establishment of market infrastructure.

The ABF example illustrates that it is meaningful to develop bond products that will help increase demand from investors under the ABMI framework as a medium- to long-term issue. For example, a product that invests local currency corporate bonds and targets individual investors as well as institutional investors is one option. The success of any such plan would likely hinge on cooperation from private-sector asset managers and securities companies.

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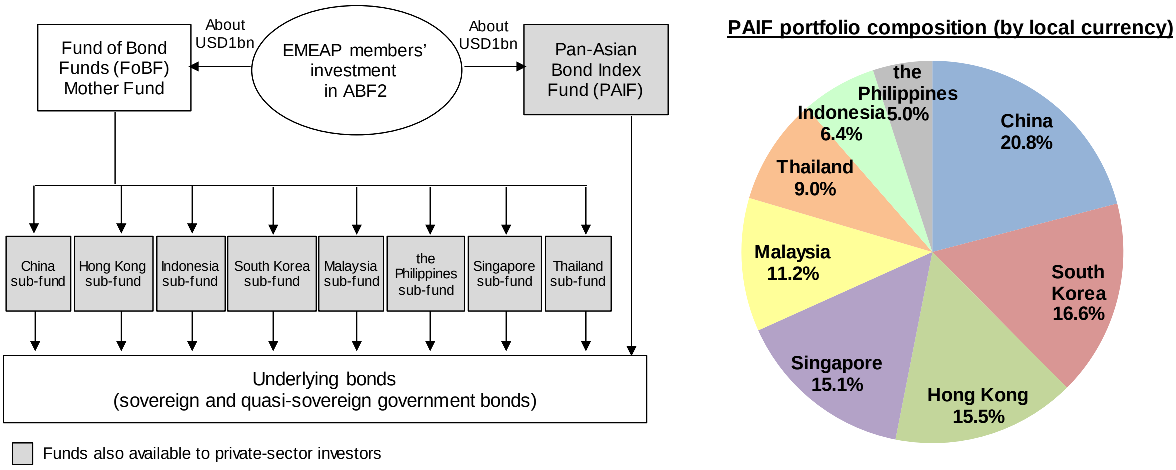
[18] EMEAP was established in 1991, based on a proposal by the Bank of Japan, to serve as a forum for the central banks and monetary authorities of member countries and territories to exchange information and opinions. The members are the central banks or monetary authorities of 11 countries/territories: Australia, China, Hong Kong, Indonesia, Japan, South Korea, Malaysia, New Zealand, the Philippines, Singapore, and Thailand.

[19] Bank of Japan, International Department, "Asia Bond Market Development and the Asian Bond Fund", October 2005

Figure 12: ABF2 and PAIF portfolio composition



Note: PAIF portfolio composition is as of end-September 2014.
Source: Nomura Institute of Capital Markets Research, based on Bank of Japan website and PAIF monthly report

V. Conclusion

The ABMI has made significant contributions to the establishment of market infrastructure and systems, which has supported the development of Asian local currency bond markets. Going forward, it is hoped that the public sector will continue to play an important role in developing the bond markets. For example, the ABMI is considered to have high potential for promoting infrastructure bonds to help meet the huge financing demand for infrastructure projects in Asia[20]. At the ASEAN+3 Finance Ministers and Central Bank Governors' Meeting in May 2013, an initiative on "Fostering Infrastructure Financing Bonds Development" was endorsed, and follow-up discussions are in progress.

Some frameworks other than the ABMI are also targeting the development of Asian bond markets. Among the most important of these other initiatives is the ASEAN Capital Markets Forum (ACMF)[21], which was established in 2004 to promote the integration of the ASEAN countries' financial and capital markets. The ACMF is bringing together securities market regulators from ASEAN countries to discuss a wide variety of themes, including disclosure standards in the region. Another important initiative is the Asia-Pacific Financial Forum (APFF), formed in 2013 at the proposal of the APEC Business Advisory Council (ABAC), the sole official private-sector advisory council for APEC (Asia Pacific Economic Cooperation). The APFF is discussing the establishment of systems that will lead to more integrated financial

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20 The Asian Development Bank and the Asian Development Bank Institute estimate that infrastructure development in the Asian region during 2010–2020 will require total investment of $8.3 trillion. (http://www.adbi.org/files/2009.08.31.book.infrastructure.seamless.asia.pdf).

21 For more information on the ACMF, see Hayashi, Hiromi, "The official blueprint for ASEAN financial integration—'The Roadmap for the Integration of ASEAN in Finance'", Nomura Institute of Capital Market Research, Summer 2013 (Japanese only).

markets in the region and is promoting the Asia Region Funds Passport as part of this effort[22].

While establishing market infrastructure and systems is an important step toward the development of the region's bond markets, the needs of issuers and investors must also be properly reflected in policies targeting market development. Private-sector financial institutions, especially securities companies, should play a larger role, as they are involved in the markets every day and have a good grasp of investor needs. It is hoped that cooperation between the public and private sectors will be strengthened to contribute to further development of Asian bond markets.

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22 For more information on the Asia Region Funds Passport initiative, see Okada, Kota, "The Unfolding Asia Region Funds Passport Initiative," Nomura Institute of Capital Markets Research, Summer 2014 (Japanese only).