



Progress of Bond Markets in East Asia

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<Summary>

➤ **Arguments on the necessity for fostering bond markets**

Among the reasons behind the Asian currency and financial crises that happened in the latter half of 1990s, there was one factor common to all the crisis-hit countries. It was a situation called a double mismatch in currency composition and maturity structure, where the financial sectors obtained short-term money in foreign currencies and invested them domestically in longer-term projects. To improve this situation of the double mismatch, and aiming at applying rich resource of savings in Asia to regional investment, it has been urged that fostering Asian markets for local currency denominated bonds is indispensable.

➤ **International framework for fostering bond markets**

In order to foster such Asian bond markets internationally, the Asian Bond Markets Initiative (ABMI) was initiated in 2003 under the international framework of the Association of Southeast Asian Nations (ASEAN) +3 (Japan, China and Korea) countries. In the past, the initiative has had such achievements as online offering of bond market data through Asian Bonds Online operated by the Asian Development Bank (ADB), Asian Bonds Market Forum (ABMF), and Credit Guarantee and Investment Facility (CGIF).

Furthermore, a preparatory work for Asia-Pacific Financial Forum (APFF) is now in progress under the framework of the Asia-Pacific Economic Cooperation (APEC).

➤ **Present Situation and Prospect**

Backed by those political supports noted above, the Asian bond markets have made a steady development, especially in terms of a scale. It can hardly be said yet, however, that the corporate bond markets have developed fully enough partly reflecting a decline in the demands of corporations for fund raising, but there has been a persistent demand for funds in this region for infrastructure investment, which promises a good chance for an increase in the corporate bonds issuing in Asia. Also in Asia an increase of middle class is greatly expected in the medium and long term, and therefore the region will grow not only as a destination of investment but also as a supplier of individual investors. Therefore, expectations are high for the development of the Asian bond markets from both sides of the fund suppliers and fund receivers.

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1 . Why are the local currency bond markets required?

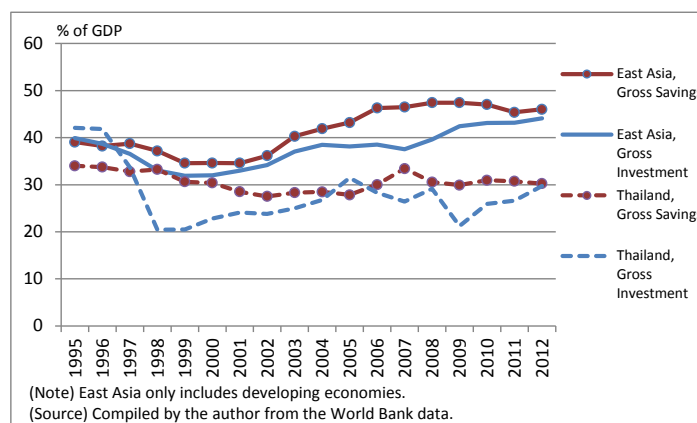
Among the reasons behind the Asian currency and financial crises that happened in the latter half of 1990s, pointed out was one factor common to all the crisis-hit countries. It was a situation called a double mismatch in currency compositions and maturity structures, where the financial sectors obtained short-term money in foreign currencies and invested them domestically in longer-term projects. The efforts to foster the Asian bond markets were originally motivated by the desire to solve this problem of double mismatch of currency composition and maturity structure that were seen in the financial markets of the Asian countries, and to aim at getting a financial stabilization in the region.

Chart 1 : Savings and Investments in East Asia

	GDP Bn\$ 2012	Gross Savings % of GDP		Gross Investment % of GDP		Savings - Investment % of GDP		
		2000	2012	2000	2012	2000	2012	
A S E A N 6	Indonesia	878	25	31	22	35	3	-4
	Malaysia	305	36	32	27	25	9	7
	Philippines	250	23	23	18	18	5	5
	Singapore	275	44	46	33	27	11	19
	Thailand	366	30	30	23	30	7	0
	Vietnam	156	31	31	30	31	1	0
	China	8,227	37	49	35	48	2	1
	Hong Kong SAR, China	263	32	27	28	26	4	1
	Korea, Rep.	1,130	33	31	31	28	2	3
	Japan	5,960	28	22	25	20	3	2

(Source) Compiled by the author from the World Bank data.

Chart 2 : Savings and Investment in East Asia (From the Asian crisis to present)



Through the global financial crisis, it became apparent that in its background there was a problem of global imbalance between the excess savings in Asia and the excess investments and consumption in the U.S. After the Asian crisis, the countries in the region took a lesson from the crisis and followed a policy to restrain on the whole their domestic investment and lower their dependence on foreign capital. As is shown in Charts 1 and 2, the region has a high saving rate and produces a great excess saving. Chart 2 shows the transition of the saving and investment balance of the whole East Asia, and especially a notable change from excess investment to excess saving due to a restrained investment at around the crisis in Thailand which triggered the contagious Asian currency crisis. The importance to foster bond markets has come to be rediscovered as a way to solve such imbalances and at the same time to increase appropriate investment opportunities that directly use the Asian savings for the growth of Asian enterprises and infrastructure investments in the region.

Another problem in the Asian financial markets is an inadequate intermediation function of financial institutions in that the financial sector lags behind the growth of the real sector because of underdeveloped legal system and financial infrastructure.

Development of bond markets that will have high liquidity has been expected to contribute to dealing with these problems and ultimately to heighten the economic growth through improvement of market-driven interest rate formation mechanism, realization of more effective resource distribution thereof, and through the improvement of transmission mechanism of monetary policies.

2. International Frameworks to foster the Asian bond markets¹

(1) Asian Bond Market Initiative (ABMI) and Asian Bond Fund Initiative (ABFI)

To foster the Asian bond markets, the Asian Bond Markets Initiative (ABMI) was initiated in 2003 under an international framework by the ASEAN+3 (Japan, China and Korea) countries.

In 2008, a new roadmap of the ABMI was formulated to establish four Task Forces (TFs), namely, TF1 on Promotion of Issues of Local Currency Denominated Bonds, TF2 on Stimulation of Demands for Local Currency Denominated Bonds, TF3 on Reforms of Regulatory Framework, and TF4 on Improvement of Infrastructure in the Bond Markets. In 2012, a New Roadmap Plus was adopted with the following 9 areas taken up as priority areas: ① Opening of guarantee business by the Credit Guarantee Investment Facility (CGIF), ② Fostering of Infrastructure Financing Scheme, ③ Improvement of Investment Environment for Institutional Investors and Their Sharing of ABMI Information, ④ Strengthening of the activities of the ASEAN+3 Bond Market Forum (ABMF), ⑤ Promotion of an initiative for establishing regional settlement intermediaries, ⑥ Further development of Sovereign bond markets, ⑦ Strengthened access for consumers and the SMEs to the financial facilities, ⑧ Strengthening of the foundation of regional rating system, and ⑨ Improvement of financial literacy.

¹ Also refer to the IIMA Newsletter No. 10, 2012 on “Domestic bond markets in the ASEAN region” http://www.iima.or.jp/Docs/newsletter/2012/NLNo_10_e.pdf, and Newsletter No.16, 2013 on “Efforts to foster the Asian bond markets” (in Japanese) http://www.iima.or.jp/Docs/newsletter/2013/NLNo_16_j.pdf.

Chart 3 : Regional Financial Cooperation in East Asia

1997/7	Asian Currency Crisis occurs at the wake of the currency devaluation of Thailand.
1997/12	The first ASEAN+3 Summit : leaders discuss on the issues concerning currency and finance of East Asia.
1999/4	The first ASEAN+3 Finance Ministers' Meeting
2000/5	The second ASEAN+3 Finance Ministers' Meeting agrees on Chiang Mai Initiative (CMI)
2002/1	Economic Review and Policy Dialogue (ERPD) started to be held twice a year by the ASEAN+3 Deputy Finance Ministers.
○ 2003/6	Executives' Meeting of East Asia and Pacific Central Banks (EMEAP) establishes Asian Bond Fund (ABF).
○ 2003/8	The Asian Bond Market Initiative (ABMI) started.
○ 2003/10	ABMI Technical Assistance Cooperation Team started to do Technical Assistance for fostering bond markets through the Japan ASEAN Technical Support Fund
○ 2004/12	ABF2 started by EMEAP.
○ 2007/4	The First Asia Bond Monitor published on Asian Bonds Online(ABO) under the initiative of the ABMI
○ 2008/5	The New Roadmap for the ABMI publicized.
2010/3	Chiang Mai Initiative Multilateralization (CMIM) comes into effect.
○ 2010/4	Report on the feasibility of the regional settlement institution published under the ABMI.
○ 2010/9	ASEAN+3 Bond Market Forum (ABMF) started under the ABMI for discussion among the authorities and private market professionals of ASEAN +3.
○ 2010/11	Credit Guarantee and Investment Facility (CGIF) established.
2011/4	ASEAN+3 Macro Economic Research Office (AMRO) established.
○ 2012/4	ASEAN+3 Bond Market Guide was published as the outcome of the ABMF.
2012/4	ASEAN establishes ASEAN Infrastructure Fund (AIF) with the cooperation of ADB. The initial capital is 490 million U.S.dollars.
2012/5	ASEAN+3 officials agree on strengthening CMIM; doubling the capacity and introducing a crisis prevention function.
○ 2012/5	ABMI New Road Map Plus publicized.
○ 2012/5	CGIF starts guarantee operations.
○ 2013/4	CGIF issues its first guarantee in Thailand.
○ 2013/12	CGIF issues its first guarantee in Indonesia for Japanese institutional investors.

(Note) ○ indicates measures to develop the bond market.

(Sources) Website of the Japanese Ministry of Finance and various sources.

Among these priority areas, the CGIF started its credit guarantee business in 2012 (The first guarantee was implemented in 2013). The ABMF was established in 2010 under the framework of TF3. This is a forum for consultation of experts from governments and private sectors to foster standardization and harmonization of regulations and market infrastructures among the countries concerned and so far 15 meetings were held internationally. In the first phase (until end of 2011) of their efforts, discussions focused on ①harmonization of regulations and standardization of market practices, and ②harmonization and standardization of bond settlements, and in April 2012 the ABMF Bond Market Guide which covered all aspects of information relating to bond market in the ASEAN+3 region was published. In the second phase

(2012-13), discussions covered, among others, an implementation of the AMBIF², a framework to develop an intra-regionally standardized bond issuance and enhancement of regional straight-through processing and effective settlement of cross-border bond transactions.

As a part of the ABMI efforts, Japan has since 2003 provided technical assistance (TACT) to foster bond market in the region through Japan-ASEAN Technical Assistance Fund funded by Japan. So far, Cambodia, Indonesia, Vietnam, Lao PDR, the Philippines, and Myanmar have received the technical assistance conducted by the dispatched private financial consultants.

Concurrently with the ABMI, the Asian Bond Fund Initiative (ABFI) has been in operation since 2003 by the Executives' Meeting of East Asia Pacific Central Banks (EMEAP).

(2) Asia-Pacific Financial Forum (APFF)

APEC Business Advisory Committee (ABAC), an advisory organization to Asia-Pacific Economic Cooperation (APEC), is preparing to establish Asia-Pacific Financial Forum (APFF) as a forum for cooperation and dialogue between government and private sectors in promoting financial cooperation and integration in the region. In April 2013, a symposium was held to start the preparation.

According to a report published after the symposium, APFF is defined to have such characteristics as being informal, advisory and inclusive, with a wide range of participants expected from governments (APEC members, ASEAN+3 and the Pacific Union where necessary), to international organizations to private sectors (financial institutions, research institutes, academia, etc.). It has the following 9 priorities to be challenged, namely (i) development of insurance industry as a provider of long term investment; (ii) development of retirement income policies; (iii) facilitating full-file, comprehensive and accessible credit reporting system; (iv) improving legal framework for secured financing; (v) facilitating trade finance; (vi) harmonization of market accesses, repatriation of funds and other market practices for further promoting cross-border investment; (vii) enhancing capital market integrity; (viii) improving capital market quality; and (ix) responding to the extra-territorial impact of new regulations in major markets on Asia-Pacific capital market development. In the areas of improved bond markets, it regards the following three as necessary challenges: (i) fostering of deep and liquid domestic bond markets, (ii) promotion of participation in the bond markets of

² ASEAN+3 Multi-Currency Bond Issuance Framework : Focusing on professional investors, it aims at harmonizing a process for bond issuance on which any participating countries can issue bonds easily under the standardized documentations and disclosures.

local SMEs and individual investors, and (iii) improvement of market infrastructure and promotion of cross-border bonds investments in the region.

(3) Framework for ASEAN Financial Integration

In addition to the ABMI, an ASEAN's own initiative is also on the way. ASEAN aims to form the ASEAN Economic Community (AEC) by 2015. Among the initiatives for the AEC, it is aiming not only at trade liberalization of goods but also at regional integration of capital markets, making efforts to harmonize and standardize accounting standard and settlement system. Specifically, ASEAN established ASEAN Capital Market Forum (ACMF) in 2004, having two meetings annually by members from national regulatory authorities. They have already realized ASEAN common disclosure standards³, mutual recognition of technical experts of the markets, and introduction of an ASEAN corporate governance scorecard, which have already been implemented in some of the member states.

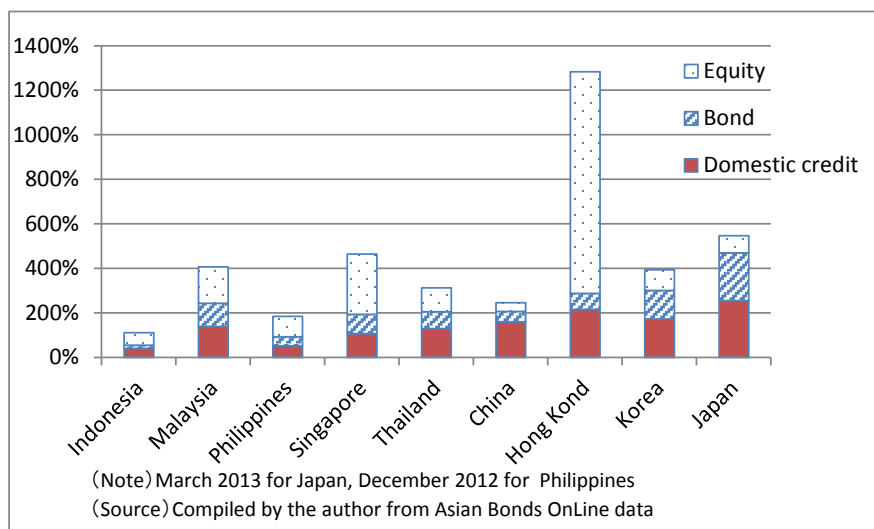
3 . Present Situation of Bond Markets in East Asia

(1) Market size

To see the development phases of bond markets in East Asian countries, Chart 4 compares the market size of bond market, bank lending and stock market in each country. From this chart, it can be seen that the development of bond market remains relatively low in comparison with their economic size. Especially in Indonesia and the Philippines, not only the size of bond market but the whole financial market is small as compared to their respective size of economy.

³ If a company makes a prospectus based on the common standards, it becomes possible in the future that the company issues bonds in any country without making individual prospectus specific for that country.

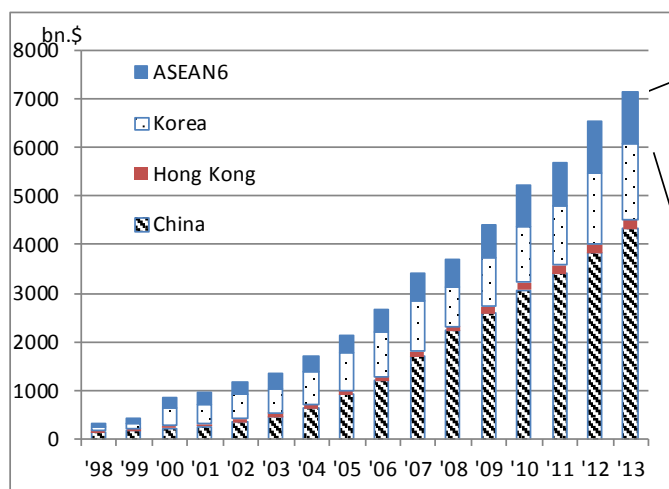
Chart 4 : Size of Financial Markets in East Asia (as of end-June 2013, % of GDP)



It is one of the characteristics common to all East Asian countries that they have a high ratio for bank lending. High dependence on bank lending is not always problematic by itself, but as was seen in case of the Asian financial crisis, there is a risk that companies will be greatly affected in their fund raising once a shock erupts in the banking sector. It is for this reason that fostering a bond market is an urgent task.

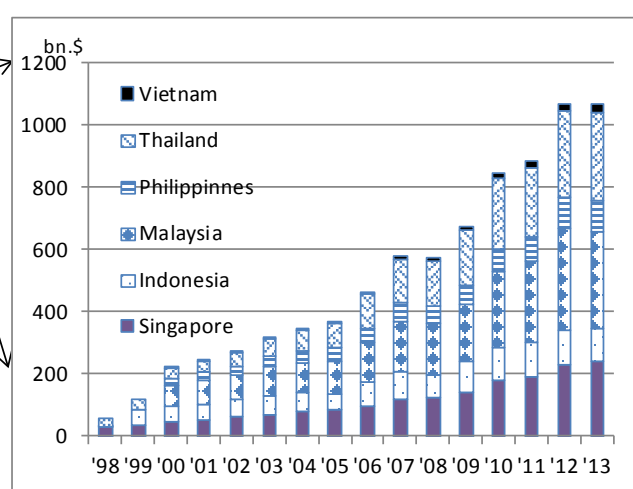
The size of bond market in East Asia excluding Japan expanded by 8.5 times from \$835.9 billion in 2000 to \$7.1 trillion in 2013 (up to end-September) (Chart 5), coming to account for nearly 10% of the world bond market. During the same period, bond markets in ASEAN6 expanded by nearly 5 times from \$218 billion to \$1,067 billion. (Chart 6)

Chart 5 : Bond Markets in East Asia



(Note) As of the end of each year, as of end of September for 2013.

Chart 6 : Bond Markets in ASEAN6



(Source) AsianBondsOnline

Helped by the support of the ABMI, the bond markets in East Asian countries have continued to develop and expand, but the level of their development varies from country to country. Among the ASEAN member states, Singapore stands out as an international financial center, and Malaysia has been establishing its status as an Islamic financial center, ranking as the largest Islamic bond market in the world. Thailand is also growing to become a big market equal to that of Malaysia and Singapore. On the other hand, the Philippines and Indonesia still compare unfavorably with other ASEAN countries. Vietnam has just started collecting data on the bond market.

In the bond markets of Indonesia, the Philippines and Thailand, the outstanding amount of the bonds slightly decreased in 2008 influenced by the global financial crisis but the decline was relatively small and since then the markets have restarted to grow steadily.

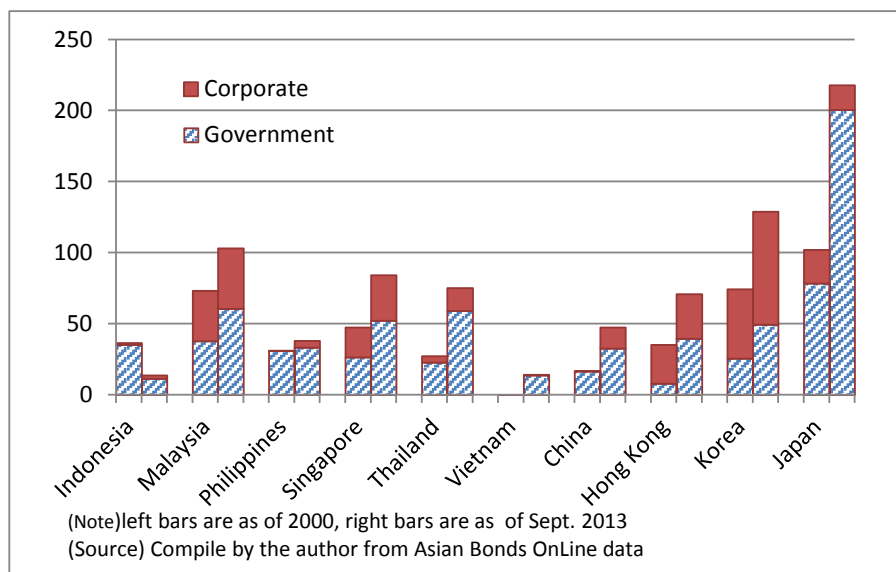
The Asian bond markets are mostly dominated by the government bonds with less issuance of corporate bonds except for Korea, Malaysia and Singapore (Chart 7). Many countries are faced with problems such as (i) that in the first place enterprises have not developed to issue bonds, and (ii) that the financial infrastructure has not been fully improved to have rating agencies and exchanges, etc. In addition, after the Asian crisis many local companies lowered their investment ratio out of regret that their excessive investment triggered the crisis, and made efforts to reduce their debts. The resulting shrinkage of capital demand of the local companies also has affected the stagnation of corporate bond issue markets in East Asia.

Chart 7: Size of Domestic Bond Markets in East Asia (Billions of US dollars, % of GDP)

	Government bonds		Corporate bonds		Total domestic bonds	
	2000	2013	2000	2013	2000	2013
China	199	3,050	3	1,405	202	4,454 (47.4)
Hong Kong	14	108	47	85	61	194 (71.0)
Korea	122	626	233	1,015	355	1,641 (128.9)
Malaysia	36	182	33	130	69	312 (103.2)
Thailand	26	224	5	61	31	286 (75.3)
Singapore	25	150	20	92	45	242 (85.0)
Indonesia	51	89	2	19	53	108 (14.4)
Philippines	21	88	0.2	13	21	101 (38.2)
Vietnam	0.1	28	0.0	0.7	0.1	29 (16.9)
ASEAN6	158	761	60	315	218	1,076
Japan	3,499	9,260	1,053	790	4,553	10,050 (217.7)

(Notes) As of the end of the year (Source) Asian Bonds Online

Chart 8 : Scale of Domestic Bond Markets in East Asia (% of GDP)



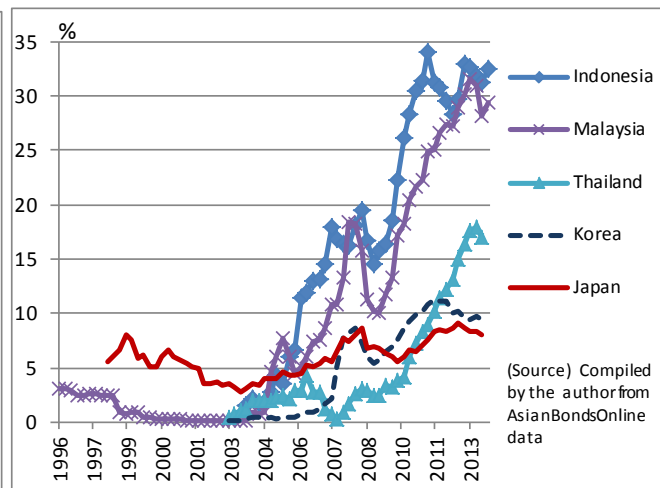
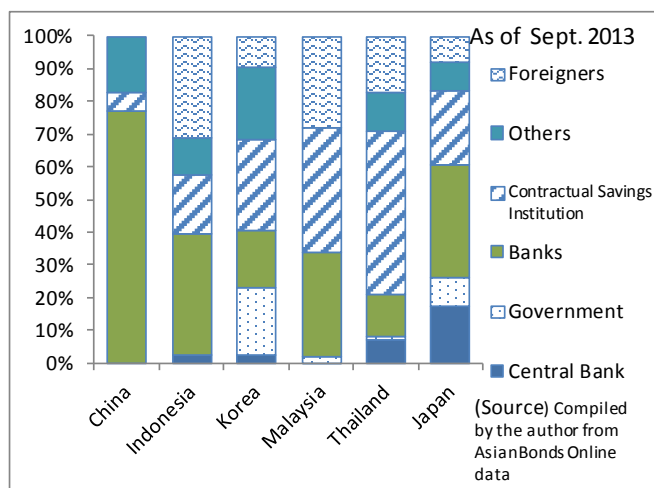
In most Asian countries, state owned enterprises, utility and infrastructure entities, financial and real estate companies account for more than half of the outstanding amounts of the corporate bonds issued and therefore it is important to broaden the base of issuing companies in order to increase the issuance of corporate bonds. Currently the majority of issuance is accounted for by the highest 30 companies or so for in most countries. In Vietnam the highest 15 companies account for almost 100% of the outstanding amount, with the highest 30 companies accounting for around 80% in the Philippines and Indonesia, for 50-60% in Thailand, Korea, Singapore and Malaysia, and around 50% in China. The only exception is Hong Kong where the highest 27 companies account for 16% of the total.

(2) Investor class

Diversification of investor class also continues to be an important challenge for the bond market in this region. Chart 9 indicates the ownership of the government bonds by investor class for the countries whose data are available on the Asian Bonds Online. Banks have a high presence for many countries except Thailand, Malaysia and Korea. In Thailand saving funds have a substantial presence while in Malaysia presence of pension funds is significant. In other countries the growth of institutional investors such as pension, insurance and mutual funds is still to be expected.

Chart 9 : Holdings of the government bond by investors

Chart 10 : Foreigners' holdings of the government bonds



Looking at the holdings of foreign investors, while they withdrew their investment after the global financial crisis and reduced their ratio among the holders, causing the interest rates on the government bonds to rise in many countries, they have started to increase their appetite again in recent years (Chart 10). In Indonesia and Malaysia, ratio of foreign holdings has reached 30% in recent years. According to the Asia Bond Monitor (ABM) dated March 2013, recent influx of foreign capital into Asia can be explained by such factors as the international interest spread, anticipation of future rise of exchange rates of Asian currencies, higher liquidity due to the growth of local bond markets. But it is also affected by the low interest rates caused by the continued financial easing in the advanced economies that encouraged the higher inflow of capital to the Asia region and therefore the ABM warns that caution should be taken to the high risk that the change of the global market might incur a rapid outflow of capital from Asia. In fact, Indonesia experienced an increase of bond yields in the first half of 2013 when foreign investors withdrew their portfolio investment while a discussion went around of a possible tapering of the US monetary policy

(3) Liquidity

Spreads between buying and selling bonds, which are a representative indicator of liquidity in the bond market, show that, although they narrowed from the level after the global financial crisis, they still stay at high level with high volatility. Especially, the spreads for corporate bonds

remain far large as compared to those for the government bonds, showing an inactive transaction of corporate bonds. In most cases, corporate bonds are held until their redemption without being traded in the secondary market, once they are bought by such investors as banks one or two months after their issuance. Their turnover ratio actually shows very low ratio as compared to the government bonds.

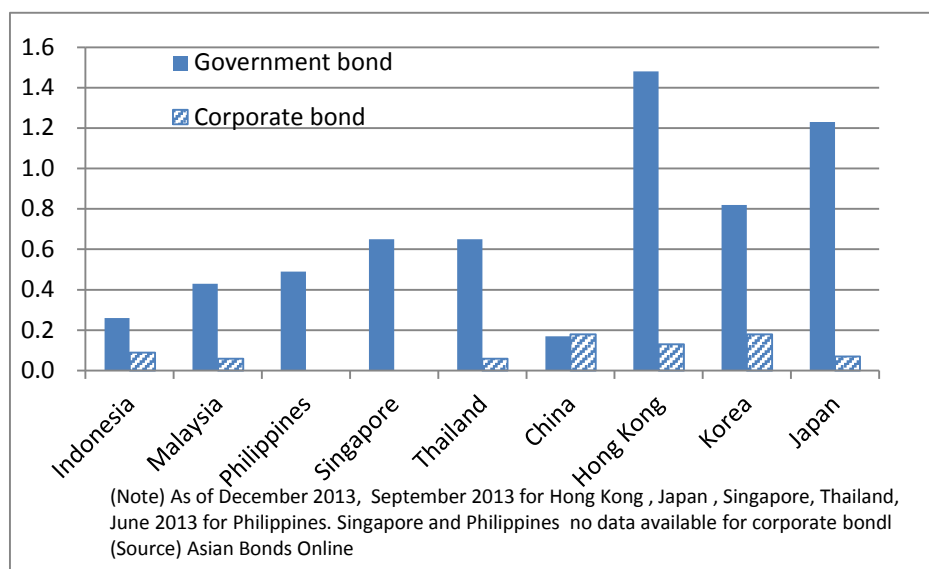
In the East Asian bond markets other than in Thailand and Vietnam, it seems that the spreads for both government bonds and corporate bonds widened in 2013 from the previous year, further lowering their liquidity. In China, jump of interest rates in the Shanghai interbank market in June 2013 (so-called SHIBOR shock) seems likely to have affected the plunge of the liquidity.

Chart 11 : Bid-Ask Spreads of Bonds in East Asia (in BPS)

	Government bond								Corporate bond							
	2006	2007	2008	2009	2010	2011	2012	2013	2006	2007	2008	2009	2010	2011	2012	2013
China	7.6	20.0	15.0	5.1	2.2	4.0	2.7	4.1	10.8	96.3	50.0	8.4	5.7	6.9	10.4	11.4
Hong Kong	3.0	8.0	4.0	4.3	5.0	4.7	6.4	7.3	6.3	30.0	25.0	26.3	12.5	28.1	21.3	31.9
Korea	1.4	4.5	1.7	1.1	1.1	0.7	0.6	0.7	3.0	n.a.	n.a.	8.4	2.6	1.7	1.9	4.4
Malaysia	2.3	1.5	12.2	2.3	2.6	3.3	2.7	3.8	18.8	15.0	5.0	10.3	16.0	8.2	9.4	9.8
Thailand	3.0	6.3	9.8	3.4	3.1	3.3	3.2	2.4	10.8	15.0	16.7	8.6	11.1	9.9	10.3	8.6
Singapore	2.7	3.4	20.0	2.9	3.0	3.8	3.1	2.6	5.5	15.0	n.a.	12.5	10.4	19.0	15.9	21.9
Indonesia	16.9	42.0	24.5	26.6	31.7	32.9	38.8	50.0	68.8	170.8	70.0	112.5	99.7	70.0	18.7	26.1
Philippines	25.3	10.0	19.8	6.6	3.1	5.3	2.1	5.4	30.0	40.6	37.5	43.8	30.5	52.9	34.5	36.6
Vietnam	n.a.	20.6	75.0	25.6	13.2	33.5	30.5	21.7	14.9	61.3	156.3	132.0	25.0	103.1	138.3	n.a.

(Source) Compiled by the author from the data of AsianBondsOnline, Asia Bond Monitor

Chart 12 : Turnover Ratio of Bonds



(4) Intra-region Cross-border investment

Chart 13 shows the outstanding amounts of cross border portfolio investment in Asia⁴ with respect to 2001 and 2012. The world's outstanding of cross-border portfolio investment increased by 3.5 times from \$7.5 trillion in 2001 to \$26.6 trillion in 2012. During this period, the portfolio investments to Asia expanded by 4.5 folds from \$302.4 billion to \$1,307.7 billion. The share of funds from Asian countries in the total also rose from 20% to 48%. Yet an increase of Asia's share in the world total investment was limited to only 5% from 4%.

Most of the Asian economies are generally expanding their share as a recipient of intra-regional investment except for Malaysia, Thailand and the Philippines which experienced a large decrease in their share during the decade. The latter three countries, however, had a larger influx of capital from Luxemburg and other European financial centers. The Philippines also received capital from Bahrain, a big financial center in the Middle East.

On the other hand, outward portfolio investment by Asian countries increased by 3.1 times from \$1,272.4 billion to \$3,938.9 billion during the decade, with intra-region investment from Asia to Asia increased 11 folds from \$60 billion to \$661.6 billion. As a result, the share of intra-regional investment in the total supply of fund to Asia rose from 5% to 17%. Excluding Japan which mainly puts its fund in the bonds of Europe and the US, the share increased further from 22% to 56%.

It is noteworthy that Hong Kong, Malaysia, Singapore and the Philippines are increasing their weight as a fund supplier of the regional portfolio investment in Asia. China also makes a big investment within the region, a large part of which is considered to be directed to Japan.

ADB conducted a research on their preference of the Asian investors among the domestic bonds, regional bonds in Asia, and global bonds (the US bond, bonds of the EU member countries) and it found that the Asian investors preferred domestic bonds to Asian bonds and global bonds (that means home bias) although at the time of 2001 they basically preferred global bonds to the Asian bonds. The research pointed out that as of 2009-2010 the home bias was continuing, but that there was no big difference between Asian bonds and global bonds.

⁴ Refers to the 13 countries and region given as destination (host) of investment in Chart 13.

Geographic Breakdown of the Portfolio Investment Asset : Total Debt Securities

<Year 2001>

millions of U.S. dollars

investment from investment in	Hong Kong	China Mainland & Macao	India	Indonesia	Japan	Korea	Malaysia	Philippines	Singapore	Thailand	Asia Total (c)	United Kingdom	United States	World Total (d)	(c)/(d)
Hong Kong China, P.R.:		445		96	1,268	306	28	25	1,684	119	3,972	8,597	1,893	16,872	24%
Macao China, P.R.:											0			23	0%
Mainland China, P.R.:	2,967	114			880	142			561		4,664	828	634	7,178	65%
India		8			166	66	6		382		627	625	301	2,125	30%
Indonesia					108	63	8	3	476		657	319	315	1,873	35%
Japan	7,103	6,881		1		75	15	5	7,299		21,379	41,480	27,125	208,238	10%
Korea, Republic of	3,789	44			5,454		3	7	2,659		11,954	3,877	4,938	25,397	47%
Malaysia	1,817	11		2	2,200	329		9	2,180		6,547	1,017	1,680	10,294	64%
Philippines	1,179				1,347	106	41		954		3,628	712	2,671	9,497	38%
Singapore	1,282	28		38	1,209	151	10	59		98	2,875	7,741	1,442	14,508	20%
Taiwan Province of China	609	27			82	8	15	13	431		1,184	287	253	2,165	55%
Thailand	659	1			748	159	21		888		2,477	425	782	4,265	58%
Vietnam														3	0%
Asia Total(a)	19,405	7,557		137	13,462	1,404	147	121	17,514	217	59,964	65,908	42,034	302,440	20%
World Total(b)	110,985	9,157		701	1,062,403	6,735	947	2,024	78,669	743	1,272,363	745,665	690,936	7,520,680	17%
(a)/(b)	17%	83%		20%	1%	21%	16%	6%	22%	29%	5%	9%	6%	4%	

<Year 2012>

investment from investment in	Hong Kong	China Mainland & Macao	India	Indonesia	Japan	Korea	Malaysia	Philippines	Singapore	Thailand	Asia Total (c)	United Kingdom	United States	World Total (d)	(c)/(d)
Hong Kong China, P.R.:		1,411		120	3,649	1,285	556	246	8,531	1,257	17,055	5,711	5,323	39,757	43%
Macao China, P.R.:	775			0						102	878	33		1,014	87%
Mainland China, P.R.:	102,529	8,521		539	600	292	89	367	4,514	337	117,789	3,720	1,032	137,539	86%
India	5,610	23		61	1,381	123	255		29,947	409	37,809	8,191	3,160	63,247	60%
Indonesia	450				4,133	146	901	1,022	13,923	53	20,627	2,230	14,649	61,082	34%
Japan	31,339	236,847		142		385	64	36	48,256	132	317,202	111,580	79,090	654,037	48%
Korea, Republic of	19,535	164	0	11	19,028		2,140	479	26,498	3,406	71,260	11,555	33,612	173,054	41%
Malaysia	10,584	306		12	3,817	374		68	17,883	93	33,137	5,787	16,974	88,647	37%
Philippines	407		18	2	2,619	33	204		3,277	4	6,564	3,097	7,833	41,007	16%
Singapore	8,776	179	0	334	8,782	340	5,101	80		259	23,850	5,611	13,414	72,226	33%
Taiwan Province of China	1,142	1		2	109	2			4,652	0	5,909	2,716	207	12,315	48%
Thailand	1,644	29		4	1,361	217	378	88	5,148		8,867	841	3,410	23,497	38%
Vietnam	414			2	44	1			167		628	264	731	3,295	19%
Asia Total(a)	183,204	247,481	18	1,230	45,522	3,198	9,686	2,387	162,796	6,052	661,575	161,335	179,435	1,370,716	48%
World Total(b)	374,819	253,244	19	11,762	2,838,097	38,737	17,838	6,699	375,705	21,952	3,938,872	2,331,274	2,606,258	26,606,617	15%
(a)/(b)	49%	98%	98%	10%	2%	8%	54%	36%	43%	28%	17%	7%	7%	5%	

(Notes) Blank cells indicate zero or data are not available. '0' Indicates a value less than US\$ 500,000. 'Asia total' indicates the total of 13 economies in 'investment in' column of this table. (Source) Compiled by the author from IMF data.

(5) Structural Issues and Agendas for Each Market

Chart 14 shows a result of a survey for the market participants that the Asian Bonds Online made as a part of the annual liquidity survey. It asked the participants on how much importance they would give to each of the eight items of (i) greater diversity of investor profiles, (ii) market access, (iii) foreign exchange regulations, (iv) transaction funding, (v) tax treatment, (vi) settlement and custody, (vii) hedging mechanisms, and (viii) transparency.

Chart 14 : Market Maker's Views on the Structural Issues of the Market

Market Maker's Views	Total Average	China	Hong Kong	Indonesia	Korea	Malaysia	Philippines	Singapore	Thailand	Vietnam
<Government Bonds>										
Greater Diversity of Investor Profile	3.4	3.4	3.1	3.6	3.1	3.6	3.8	3.1	3.3	3.8
Market Access	2.7	3.0	2.4	2.7	2.7	2.9	3.3	2.8	2.6	2.3
FX Regulations	3.1	2.9	2.3	3.3	3.3	3.4	3.5	3.1	3.3	2.7
Transaction Funding	3.2	3.6	2.6	3.3	3.1	3.2	3.3	2.9	3.2	3.5
Tax Treatment	2.5	2.2	1.5	3.0	2.8	2.9	3.3	2.0	2.8	2.3
Settlement & Custody	2.8	3.0	1.9	2.7	3.0	3.3	3.5	2.8	2.7	2.6
Hedging Mechanisms	3.3	3.8	2.9	2.9	3.1	3.5	3.0	3.4	3.1	4.0
Transparency	3.1	3.2	2.2	3.2	3.1	3.2	3.5	3.0	3.3	3.4
<Corporate Bonds>										
Greater Diversity of Investor Profile	3.6	3.5	3.8	3.7	3.1	3.5	3.7	3.6	3.6	3.5
Market Access	2.6	3.0	1.8	2.9	2.4	2.8	3.0	2.8	2.6	2.5
FX Regulations	2.9	2.8	1.5	3.0	3.3	3.2	3.1	3.2	3.3	2.8
Transaction Funding	3.0	3.8	2.3	3.1	2.9	2.8	3.0	2.9	3.0	3.1
Tax Treatment	2.5	2.3	1.5	2.9	2.3	2.5	3.0	2.0	3.1	3.0
Settlement & Custody	2.9	2.7	1.8	2.9	3.1	3.1	3.3	2.8	2.9	3.4
Hedging Mechanisms	3.0	3.5	2.3	3.1	3.3	3.7	2.5	3.1	3.3	2.5
Transparency	2.9	3.0	2.0	3.2	3.0	2.6	3.1	2.9	3.1	3.0

(Note) Market participants were asked to characterize each issue by degree of importance: 1.Not important, 2.Somewhat important, 3.Importance, 4.Very important. Numerical values were assigned for each answer ranging from 1(Not important) to 4(Very important). Number of each cell is simple average.

(Source) Compiled by the author from the data of Asia Bond Monitor

On the government bond market, it is seen that the participants give their importance in the order of greater diversity of investor profile, hedging mechanism, transaction funding, foreign exchange regulations, transparency, settlement and custody, market access, and tax treatment.

In respect of a greater diversity of investor profile, it should be remembered that banks hold nearly 80% of the government bonds in China, as was seen in Chart 9 above. High score for funding in China seems to have reflected a strong consciousness about the liquidity problem at the time of SHIBOR shock and after. In Indonesia, inability of repo transactions seems to have been deemed as a bottleneck of funding.

On the corporate bond market, too, greater diversity of investor profile is given the highest importance, followed by hedging mechanism, transaction funding, foreign exchange regulations,

transparency, settlement and custody, market access. The order of emphasized items is almost the same as in the government bond market, but the value of the items is smaller than in the government bond market except for that on greater diversity of investor profile and settlement and custody. It seems that greater diversity of investor profile has been seen all the more urgent as the holding structure of the corporate bond market has been more dominated by a small number of holders than in the government bond market. On the other hand, hedging mechanism is not given so much importance in the corporate bond market as in the government bond market. This may reflect the thought of participants that as the risks on corporate bonds usually relate to the issuers themselves, they would not fit in with hedging and the risks can be rather tolerated for higher returns. High value of importance on settlement and custody may result from the fact that in many countries the settlement system for corporate bonds is not so well introduced as compared to the settlement system for the government bonds.

(6) Rating Agencies in the Region

Currently, each Asian country has several rating agencies at home (Chart 15). Also it is notable that major rating agencies of the US and Europe are actively involved in the business directly or indirectly (in the form of capital affiliation or technical tie-up, etc.), expanding their activities in this region.

Common challenges for the rating agencies in East Asia to face include (i) the small scale of a corporate bond market with small number of companies to be rated, (ii) low level of international credibility and recognition of the local rating agencies themselves, (iii) disparities in ratings between the local and global rating agencies and resulting difficulty of comparison of ratings even for the Asian countries.

In an effort to deal with these problems, rating agencies in Asia have organized the Association of Credit Rating Agencies in Asia(ACRAA)⁵ to foster the rating business in the region. Among others, they have been executing various ideas, including establishing common code of conducts for ACRAA members, comparison of ratings for individual countries based on the research of default data, common implementation of education of rating analysts.

⁵ Members include 30 rating agencies in 13 economies.

Chart 15 : Rating Agencies in East Asia

Country	Company name	Capital relationship with GCRA's	ACRAA ¹ membership
Indonesia	Pefindo Credit Rating Indonesia	no but technical assistance from S&P	○
	PT ICRA Indonesia	no but parent company ICRA India is Moody's affiliate	○
	PT. Fitch Rating Indonesia	*Fitch	
Malaysia	Malaysian Rating Corporation Berhad (MARC)	no	○
	RAM Rating Services Bhd	Fitch 4.9%, McGraw-Hill Asia Hldg(Singapore)4.9%	○
Philippines	Philippine Rating Services Corporation (PhilRatings)	no	○
	Credit Rating and Investors Services Philippines, Inc.		
Singapore	Moody's Singapore PTE Ltd.	*Moody's	
	Standard and Poors International L.L.C.	*S&P	
	Fitch Ratings Singapore Private Ltd.	*Fitch	
Thailand	TRIS Rating Co. Ltd.	no	○
	Fitch Thailand	*Fitch	
China, with the licence approved by the PBC ²	Shanghai Brilliance Credit Rating & Investors Service Co., Ltd.	no	○
	Dagong Global Credit Rating Co., Ltd.	partnership with Moody's	○
	China Chengxin International Credit Rating Co., Ltd.	Joint-venture with Fitch,IFC	○
	China Lianhe Credit Rating Co., Ltd.	Fitch 49%	○
	Golden Credit Rating International Co., Ltd.		
	Shanghai Far East Credit Rating Co., Ltd.		○
China, with the licence approved by the CSRC ³	Shanghai Brilliance Credit Rating & Investors Service Co., Ltd.	no	○
	Dagong Global Credit Rating Co., Ltd.	partnership with Moody's	○
	China Chengxin Credit Rating Co., Ltd.		
	China Lianhe Credit Rating Co., Ltd.	Fitch 49%	
	Golden Credit Rating International Co., Ltd.		
	Pengyuan Credit Rating Co., Ltd.		
Hong Kong	Moody's Asia-Pacific Ltd.	*Moody's	
	Standard and Poors International L.L.C.	*S&P	
	Fitch (Hong Kong) Ltd.	*Fitch	
Japan	Japan Credit Rating Agency,Ltd.	no	○
	Moody's Japan K.K.	Moody's	
	Moody's SF Japan K.K.	Moody's	
	Standard and Poor's Rating Japan K.K.	S&P	
	Rating and Investment Information, Inc	no	
	Fitch Rating Japan Limited	Fitch	
	Nippon Standard and Poor's K.K.	S&P	
Korea	Korea Investors Service, Inc. (KIS)	Moody's	○
	Korea Ratings Corporation (Korea Ratings)	Fitch 73.5%	○
	Nice Investors Service Co. Ltd. (NICE)	no	○
	Seoul Credit Rating & Information, Inc. (SCRI)	no	○

Notes: 1.ACRAA: the Association of Credit Rating Agencies in Asia

2.PBC: the People's Bank of China

3.CSRC: the China Securities Regulatory Commission

4.*: GCRA's subsidiary defined by Japanese Financial Services Agency

(Source) Compiled by IIMA from company website, AsianBondsOnline and hearing from ACRAA members

4. Prospects and Challenges

Capital market in East Asia has been continuing to expand in scale, but it still lags in many aspects including the diversity of corporate bond issuers, fostering of investors, standardization

of the system and transparency, etc. Further and continued assistance will be needed by international cooperation such as the ABMI.

(1) Asian Capital Market as Attractive Investment Destination : Expectations on the Continued Infrastructure Demand

Whereas the advanced economy was forced to go through stagnation in the aftermath of the global financial crisis and the following European sovereign crisis, the positioning of the emerging market economies in the global economy has changed. Although some countries have suffered from an outflow of capital and depreciation of their foreign exchange rates influenced by the discussion on the tapering of the US monetary easing, emerging economies in Asia, as a new growth center, have been expected to play a role of an engine for growth of the global economy. Against this background, Asian capital markets have attracted investors with an increased inflow of capital in the form of portfolio investment. Some of the countries even have strengthened restrictions of capital control to decelerate the inflow of capital, but the Asian capital markets will continue to attract the investors for the time to come.

According to ADB, infrastructure demands in Asia for the years of 2010-2020 are estimated to amount to \$8 trillion, or a yearly demand of \$730 billion (Chart 16). Among them, East Asia accounts for \$4.7 trillion, or about 60%.

In some countries like Malaysia which have an advanced capital market, they have already seen corporate bonds issued by infrastructure-related companies, but in many countries in Asia, bank loans used to be a major form of private financing methods for infrastructure sector. However, after the global financial crisis, the regulations on banks have been internationally strengthened and therefore the long-term lending of banks is getting harder to obtain for the infrastructure sector. In addition, in such industries as energy and transportation, there are more and more projects having cross-border and region wide involvement, which often accompany many difficulties in financing. From these points of view, it is urgently hoped that more cross-border portfolio investment would be encouraged so as to promote inflows of investment funds to the infrastructure sector in this region.

Chart 16 : Asia's Total Infrastructure Investment Needs by Sector, 2010-2020

(in 2008 \$ billions)

	New Capacity	Replacement	Total
Energy	3,176	912	4,089
Telecommunications	325	730	1,056
Transport	1,762	704	2,466
Water and Sanitation	155	226	381
Total	5,419	2,573	7,992

(Source) ADB, "Infrastructure for a Seamless Asia" 2009

(2) Greater Diversify of Investor Profiles : Expectations for the Middle Class in Asia as an Investor

Asia Pacific region is a home to a great number of people and has a high potential of growth. It is also expected to have an expansion of the number of middle class in the medium term. This is worthy of attention not only from the point of capital needs but also from the growth of investors in line with the expansion of the middle class. As the income level rises, amount of personal assets will also grow. As was seen earlier, the scarcity of investors is on the top of the present problems that the East Asia faces, but there will be a great room for enlargement of investors once the systems are improved for well-functioning mutual funds, pension funds, insurance and others.

Chart 17 : Estimated Middle Class by Region (in million persons, %)

	2009		2020		2030	
	Numbers	Share	Numbers	Share	Numbers	Share
North America	338	18%	333	10%	322	7%
Europe	664	36%	703	22%	680	14%
Central and South America	181	10%	251	8%	313	6%
Asia Pacific	525	28%	1,740	54%	3,228	66%
Sub-Saharan Africa	32	2%	57	2%	107	2%
Middle East and North Africa	105	6%	165	5%	234	5%
World	1,845	100%	3,249	100%	4,884	100%

(Note) The definition of Middle class is a range of income US\$10 to US\$100 in purchasing parity per capita per day.

(Source) OECD, "The Emerging Middle Class in Developing Countries", Jan.2010

<Reference>

ADB, Asia Bond Monitor, various editions

IIMA Newsletter, “Domestic Bond markets in The ASEAN Region”, May 2012

The ASIA-PACIFIC Financial Market Development Symposium, Conference Report, April 2013

Iwan J. Azis and Sabyasachi Mitra, “Why do intra-regional debt investments remain low in Asia?”, ADB, Policy Brief, June 2012

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